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216654

UNIVERSITY BULLETINS. SERIES 4, NUMBER 1.

TWENTY-EIGHTH ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

OF THE

OHIO STATE UNIVERSITY,

TO THE

GOVERNOR OF OHIO,

FOR THE

Year Ending June 30, 1898.

Entered at the Columbus Postoffice as Second-class Matter.

COLUMBUS:
PUBLISHED BY THE UNIVERSITY.
January, 1899.

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OF THE

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TO THE

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ASTOR, LENOX AND
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1901

BOARD OF TRUSTEES

1897–1898

		Term Expires
*Joseph H. Outhwaite	Columbus	May 13, 1898
Wm. I. Chamberlain	Hudson	" 1899
David M. Massie	Chillicothe	" 1900
John T. Mack	Sandusky	" 1901
Lucius B. Wing	Newark	" 1902
Thomas J. Godfrey	Celina	" 1903
J. McLain Smith	Dayton	" 1904
Paul Jones	Columbus.	" 1905

OFFICERS OF THE BOARD

John T. Mack	President
Wm. I. Chamberlain	Vice President
Alexis Cope	Secretary
Fred W. Prentiss	Treasurer

COMMITTEES OF THE BOARD

EXECUTIVE	FARM	FINANCE
L. B. Wing	Wm. I. Chamberlain	D. M. Massie
T. J. Godfrey	L. B. Wing	T. J. Godfrey
Paul Jones	J. McLain Smith	J. McLain Smith

FACULTY AND COURSES OF STUDY

Thomas J. Godfrey Wm. I. Chamberlain John T. Mack

*Failed of confirmation February 15, 1898, and Paul Jones appointed his successor.

MEMBERS OF THE FACULTIES, AND OTHER INSTRUCTORS

1897–1898.

JAMES HULME CANFIELD,
President—University Grounds.

EDWARD ORTON,
Professor of Geology and State Geologist—100 Twentieth street.

WILLIAM HENRY SCOTT,
Professor of Philosophy—131 Fifteenth avenue.

SIDNEY AUGUSTUS NORTON,
Lecturer in General Chemistry—363 East Town street.

NATHANIEL WRIGHT LORD,
Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering—338 West Eighth avenue.

SAMUEL CARROLL DERBY,
Professor of Latin, and Dean of the College of Arts, Philosophy and Science—98 Fifteenth avenue.

WILLIAM RANE LAZENBY,
Professor of Horticulture and Forestry—The Marion.

JOSIAH RENICK SMITH,
Professor of the Greek Language and Literature, and President pro tempore of the University Faculty—239 East State street.

HENRY ADAM WEBER,
Professor of Agricultural Chemistry—1342 Forsythe avenue.

BENJAMIN FRANKLIN THOMAS,
Professor of Physics and State Sealer of Weights and Measures—University Grounds.

GEORGE WELLS KNIGHT,
Professor of History and Political Science, and of Constitutional Law and International Law—University Grounds.

ROSSER DANIEL BOHANNAN,
Professor of Mathematics—Sixteenth and Indianola avenues.

(1) DAVID SIMONS KELLICOTT,
Professor of Zoology and Entomology—1332 Highland street.

C. NEWTON BROWN,
Professor of Civil Engineering—1343 Forsythe avenue.

ERNST AUGUST EGGERS,
Professor of Germanic Languages and Literatures—University Grounds.

ALBERT MARTIN BLEILE,
Professor of Anatomy and Physiology—218 King avenue.

WILLIAM ASHBROOK KELLERMAN,
Professor of Botany—175 Eleventh avenue.

THOMAS FORSYTH HUNT,
Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science—188 West Tenth avenue.

(1) Died April 13, 1898.

(1) ARTHUR LYMAN WILLISTON,
Director of the Department of Industrial Arts—652 Franklin avenue.

GEORGE BEECHER KAUFFMAN,
Professor of Pharmacy, and Dean of the College of Pharmacy—University Grounds.

BENJAMIN LESTER BOWEN,
Professor of Romance Languages and Literatures—46 Jefferson avenue.

JOSEPH VILLIERS DENNEY,
Professor of Rhetoric and the English Language, and Secretary of the University Faculty—The Marion.

ALLEN CAMPBELL BARROWS,
Professor of English Literature—15th and Indianola avenues.

EDWARD ORTON, JR.,
Director of the Department of Clay-Working and Ceramics—The Normandie.

JOHN THOMAS MARTIN,
Professor of Military Science and Tactics—1194 Fair avenue.

ROBERT IRVING FULTON,
Professor of Elocution and Oratory—Delaware, Ohio.

WILLIAM FOREST HUNTER,
Dean of the College of Law; Professor of the Law of Sales, Bailments, Evidence, Wills, Construction of Contracts, Law of Corporations; Judge of Moot Courts—1032 Bryden Road; 18 Board of Trade.

DAVID FRANKLIN PUGH,
Professor of Equity Jurisprudence and Law of Real Property—1320 Highland street; Court House.

EMILUS OVIATT RANDALL,
Professor of Commercial Law—1025 Oak street; Supreme Court Room.

EDGAR BENTON KINKEAD,
Professor of the Law of Pleading and Practice, Torts, and of Criminal Law—Wyandotte avenue; Board of Trade.

WILLIAM HERBERT PAGE,
Professor of Elementary Law—527 East Broad street; 27 Board of Trade.

WILLIAM THOMAS MAGRUDER,
Professor of Mechanical Engineering—329 W. 8th avenue.

JOHN PANCOAST GORDY,
Professor of Pedagogy—The Normandie.

WM. MCPHERSON, JR.,
Professor of General Chemistry—97 Hamilton avenue.

JOSEPH NELSON BRADFORD,
Associate Professor of Drawing—54 West Tenth avenue.

HENRY CURWIN LORD,
Director of the Emerson McMillen Observatory and Associate Professor of Astronomy—401 W. 6th avenue.

DAVID STUART WHITE,
Associate Professor of Veterinary Medicine and Dean of the College of Veterinary Medicine—West Fifth avenue.

FRANK ARNOLD RAY,
Associate Professor of Mine Engineering—The Marion.

OLIVE BRANCH JONES,
Librarian—53 Eleventh avenue.

EMBURY ASBURY HITCHCOCK,
Associate Professor of Experimental Engineering—380 West Eighth avenue.

(1) Resigned to accept position at Pratt Institute, Brooklyn, N. Y.

FRANCIS CARY CALDWELL,
Associate Professor of Electrical Engineering—380 W. 8th avenue.

PERLA G. BOWMAN,
Associate Professor of Domestic Science—167 West Eleventh avenue.

CLARENCE P. LINHART,
Director of the Gymnasium—The Great Southern.

GEORGE WASHINGTON MCCOARD,
Assistant Professor of Mathematics—319 West Fifth avenue.

WILBUR HENRY SIEBERT,
Assistant Professor of History—1332 Highland Avenue.

CHARLES WALTER MESLOH,
Assistant Professor of German—University Grounds.

WILLIAM DAVID GIBBS,
Assistant Professor of Agriculture—Neil and Tenth avenues.

HERBERT JAMES NOYES,
Assistant Professor of Dairy Husbandry—Richland City, Wisconsin.

FREDERICK CONVERSE CLARK,
Assistant Professor of Economics and Sociology—15th and Indianola avenues.

JAMES ELLSWORTH BOYD,
Assistant Professor of Physics—25 Maynard avenue.

JOSEPH RUSSELL TAYLOR,
Assistant Professor of Rhetoric—56 King avenue.

CLAIR ALBERT DYE,
Assistant Professor of Pharmacy—169 King avenue.

(1) PAUL JONES,
Lecturer on Law of Contracts, 1194 Bryden Road: 20 Hayden Building.

JAMES HENRY COLLINS,
Lecturer on Federal Practice—57 Lexington avenue; Ruggery Building.

FAXON FRANKLIN DUANE ALBERY,
Professor of the Law of Insurance—37 Lexington avenue: 119½ S. High street.

JOHN A. SHAUCK,
Lecturer on Supreme Court Practice, Special cases, etc.—95 Winner avenue.

CHARLES LINCOLN ARNOLD,
Assistant in Mathematics—239 West Tenth avenue.

EDWARD M. VAN HARLINGEN,
Assistant in Anatomy and Physiology—1594 Neil avenue.

THOMAS EWING FRENCH,
Assistant in Drawing—435 E. Naughton street.

CHARLES WILLIAM WEICK,
Assistant in the Industrial Department and Foreman of the Carpenter and Pattern Shops—134 West Eighth avenue.

WILLIAM ABNER KNIGHT,
Assistant in the Industrial Department and Foreman of the Machine Shops—206 West Lane avenue.

HARRIET TOWNSHEND,
Assistant Librarian—53 West Eleventh avenue.

KARL DALE SWARTZEL,
Assistant in Mathematics—57 West Frambes avenue.

(1) Resigned upon being appointed trustee of the University.

THOMAS KENYON LEWIS,
Assistant in Drawing—68 East Seventh avenue.

CHARLES A. BRUCE,
Assistant in French—234 West Tenth avenue.

JOHN ADAMS BOWNOCKER,
Assistant in Geology—Clark Place and High street.

JOHN H. SCHAFFNER,
Assistant in Botany—61 West Eleventh avenue.

FRANCIS LEROY LANDACRE,
Assistant in Zoology and Entomology—70 West Tenth avenue.

JAMES STEWART HINE,
Assistant in Entomology—117 King avenue.

WILLIAM FINLEY LAVERY,
Assistant in Veterinary Medicine—1700 Neil avenue.

MAUD DOROTHY JEFFREY,
Assistant Librarian—65 West Eleventh avenue.

GERTRUDE STOWELL KELLICOTT,
Assistant Librarian—1332 Highland street.

FRANK HAAS,
Assistant in Metallurgy and Mineralogy—233 Eleventh avenue.

(1) WILLIAM LLOYD EVANS,
First Assistant Director in the Department of Clay-Working and Ceramics—189 Jefferson avenue.

ARTHUR WINFRED HODGMAN,
Assistant in Greek and Latin—164 West Ninth avenue.

CHRISTOPHER ELIAS SHERMAN,
Assistant in Civil Engineering—244 Twentieth street.

CHARLES CONRAD SLEFFEL,
Assistant in Industrial Department and Foreman of the Forge Room—174 West First avenue.

ALBERT EARL VINSON,
Assistant in Agricultural Chemistry—Neil and Tenth avenues.

CHARLES WILLIAM FOULK,
Assistant in General Chemistry—41 Eleventh avenue.

WILLIAM LUCIUS GRAVES,
Assistant in Rhetoric—878 Dennison avenue.

CHARLES WILLIAM BURKETT,
Assistant in Agriculture—1556 Neil avenue.

(2) WARREN KING MOOREHEAD,
Curator of the Archæological Collection—1080 Madison avenue.

FREDERICK EDWARD KESTER,
Assistant in Physics—1473 Neil avenue.

CLYDE T. MORRIS,
Emerson McMillin Fellow, and Assistant in Astronomy.

C. B. HINE,
Assistant in Horticulture and Forestry.

CLARK WISSLER,
Assistant in Philosophy and Pedagogy—1355 N. High street.

(1) Resigned March 3, 1898, to accept position at Colorado Springs. Theo. L. Griffin elected his successor.

(2) September 10, 1897, at his own request granted indefinite leave of absence from November 1, 1897. W. C. Mills elected to position.

STELLA ELLIOTT,
Gymnasium Assistant—54 W. Tenth avenue.

ROBERT FISCHER,
Fellow and Laboratory Assistant in Chemistry—810 Franklin avenue.

(1) EDWARD F. WATSON,
Fellow and Laboratory Assistant in Chemistry—106 W. Ninth avenue.

J. R. SPURRIER,
Fellow and Laboratory Assistant in Electrical Engineering—234 W. Franklin avenue.

MELVIN DRESBACH,
Fellow in Anatomy and Physiology—236 W. Eighth avenue.

JOHN H. FOX,
Fellow in Industrial Arts—199 W. Eleventh avenue.

HARRY W. KUHN,
Fellow in Mathematics—221 W. Eleventh avenue.

HORACE JUDD,
Fellow in Mechanical Engineering—22 W. Woodruff.

JAMES GRANT BOYD,
Fellow in Veterinary Medicine—38 W. Woodruff.

C. B. FREDERICK,
Fellow in Veterinary Medicine—Veterinary Hospital.

JOHN F. CUNNINGHAM,
Fellow in Horticulture and Forestry—1462 Washington street.

EDWARD E. SOMERMEIER,
Student Assistant in Chemistry.

(1) Resigned December 17, 1897. F. O. Clements appointed his successor.

EXECUTIVE DEPARTMENT.

JAMES H. CANFIELD.....President.
ALEXIS COPE.....Secretary Board of Trustees.
W. C. MCCRACKEN.....Chief Engineer.
JEAN BLACKFORD.....Executive Clerk.
EDITH D. COCKINS.....Registrar.
MARY HOWELLS COPE.....Clerk in Office of Board of Trustees.
E. E. HARROLD.....Storekeeper Chemical Laboratories.
CHARLES LOWE.....Assistant Engineer.
WILLIAM STANDLEY.....First Fireman.
BENJAMIN LEBAY.....Second Fireman.
W. R. BEATTIE.....Gardener and Florist.
JAMES KELLY.....Lawnkeeper.
HENRY MARTZ.....Watchman.

JANITORS.

ARTHUR CHANTLER.....University Hall.
WASHINGTON TOWNSELL.....Orton Hall.
F. B. BREWER.....Chemical Hall.
JOHN E. ADAMS.....Hayes Hall.
JOHN CONRAD.....Horticultural Hall and Verterinary Hospital.
J. B. PARKER.....Botanical Hall.
EDWARD STALTER.....Observatory.
G. A. FLICKENGER.....Chapel.
M. N. COOK.....Townshend Hall
WILLIAM WHITESTINE.....Biological Building.
D. D. GEREN.....Armory and Gymnasium.

STATE GEOLOGIST.

PROFESSOR EDWARD ORTON.

STATE SEALER OF WEIGHTS AND MEASURES.

THE PROFESSOR OF PHYSICS, *Ex-Officio.*

COLUMBUS, O., June 30, 1898.

His Excellency, HON. ASA S. BUSHNELL, Governor of Ohio:

DEAR SIR: I have the honor to transmit herewith the twenty-eighth annual report of the Board of Trustees, Ohio State University.

Very respectfully,

Your obedient servant,

ALEXIS COPE, Secretary.

Report of Board of Trustees.

OFFICE OF THE BOARD OF TRUSTEES,
OHIO STATE UNIVERSITY,
COLUMBUS, OHIO, June, 30, 1898.

HON. ASA S. BUSHNELL, Governor of Ohio:

SIR: In compliance with law, the Board of Trustees respectfully submits the twenty-eighth annual report of the Ohio State University, it being for the year ending June 30, 1898.

ACKNOWLEDGMENTS.

The University renews its acknowledgments to the Governor and General Assembly for the fostering care bestowed upon the institution and to the people of the state for their continued appreciation and support.

ENDOWMENT.

The part of the irreducible debt of the state which forms the endowment of the University was, at the date of the last annual report, June 30, 1897, $549,370.24, upon which the annual interest was $32,962.21.

Under the operations of the act of the General Assembly of March 14, 1889, entitled "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," the following addition was made thereto: May 10, 1898, $48.03.

There was also added thereto under the act of May 21, 1894, entitled "An act to amend section one of an act entitled 'An act for the relief of certain persons who formerly held land in the Virginia Military District of Ohio, passed April 21, 1893,'" and the act of April 26, 1898, entitled "An act making appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," the sum of $1,051.00, making the endowment fund June 30, 1898, $550,469.27, on which the annual interest is $33,028.15.

RECEIPTS AND DISBURSEMENTS.

The receipts from all sources and the disbursements for all purposes for the year ending June 30, 1898, have been as follows:

RECEIPTS.

Balance in treasury June 30, 1897	$19,782 38	
Interest on endowment	32,973 11	
State levy	185,623 61	
Sale of refunding bonds	10,645 50	
Appropriation Act of Congress, 1890	23,000 00	
Students' fees	25,216 50	
Certificates of indebtedness	157,620 55	
Store-room cards	2,125 61	
Sales store-room supplies	588 66	
Rents	1,709 00	
Cash donations for Department Economics	850 00	
Emerson McMillin Fellowship in Astronomy	300 00	
Unclaimed drafts	857 52	
N. B. M. A. Scholarship	250 00	
Miscellaneous receipts	137 99	
Cash advanced by treasurer	495 36	
		$462,175 79

DISBURSEMENTS.

Salaries	$137,572 42
Expenses of trustees	762 86
Repairs	7,793 24
Fuel and light	6,473 98
Library	3,620 98
Printing and advertising	2,222 41
Virginia Military Lands	194 30
Roads and grounds	1,617 60
Apparatus, machinery, etc	12,663 25
Laboratory supplies	5,067 28
Bonds and interest	27,176 46
Townshend Hall	76,771 52
Biological Building	46,218 39
Armory and Gymnasium	98,936 76
Equipment Townshend Hall	12,342 28
Equipment Armory and Gymnasium	5,663 91
Equipment Biological Building	6,467 43
Elevator	2,083 85
College of Law	2,384 44
Office rent	138 50
Furniture	281 40
Water	722 48
Postage	411 06
Telephone service	263 74
Rent fire alarm and signal boxes, etc	130 95
Commencement expenses	286 05
Telegrams	41 64
General supplies, cleaning material, etc	314 86

Freight and cartage	$ 108 59	
Student assistance library	216 77	
Fitting up athletic field	322 19	
Guide and messenger service	340 94	
Lubricating oils	279 01	
Pipe machine	188 75	
Dedication Townshend Hall	365 17	
Stationery and blank books	145 12	
Expenses visiting educational meetings, high schools, etc.	146 55	
Agricultural students union	97 30	
Extra janitors	162 65	
Balance due architects Orton Hall	262 50	
Repaid on bond transaction	206 25	
Clerical assistance, agriculture	123 37	
Photographs, buildings	85 50	
Extra labor steam heating plant	52 88	
Miscellaneous expenses	448 21	
		$462,175 79

NEW MORRILL FUND.

The following statement shows the receipts and expenditures for the year ending June 30, 1898, of appropriations made by act of Congress approved August 30, 1890, and known as the "New Morrill Fund," and which are included in the preceding statement of the aggregate receipts and disbursements:

RECEIPTS.

Balance in treasury June 30, 1897	$853 94	
Appropriation year ending June 30, 1898	23,000 00	
		$23,853 94

DISBURSEMENTS.

For instruction and facilities in agriculture	$7,622 03	
For instruction and facilities in mechanic arts	6,828 23	
For instruction and facilities in English language	693 40	
For instruction and facilities in natural science	7,148 50	
For instruction and facilities in mathematical science	847 76	
For instruction and facilities in economic science	446 60	
		23,586 52
Balance June 30, 1898		$267 42

The law of Congress requires a detailed annual report of the receipts and disbursements of this fund, which report for the year ending June 30, 1898, is appended to the treasurer's report filed herewith.

VIRGINIA MILITARY LANDS.

Up to June 30, 1898, the total receipts from the sale of Virginia Military Lands granted to the University by act of the general assembly of March 26, 1872, were		$65,168 66
The expenses incidental to the survey and disposition of such lands to June 80, 1898, were	$22,765 80	
Such expenses for year ending June 30, 1898, were	194 30	
		22,960 10

Leaving net cash receipts from this source		$42,208 56
Of this sum there has been paid to the credit of the endowment fund	$13,665 14	
And expended for building and maintaining residences for professors under act of April 17, 1882	20,052 51	
		33,717 65
Leaving balance June 30, 1898		$8,490 91

Said receipts and disbursements for year ending June 30, 1898, are also included in the preceding general account of the aggregate receipts and disbursements.

Up to June 30, 1897, the additions to the endowment fund under the operations of the act of the general assembly of March 14, 1889, entitled "An act to quiet title to unpatented lands in the Virginia Military District of Ohio," the act of April 21, 1893, entitled "An act for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio" and an act amendatory of said last mentioned act passed May 21, 1894, there was added to said endowment fund the sum of		$11,528 80
During the year ending June 30, 1898, under the operations of said first mentioned acts, there was added to said endowment fund the sum of	$48 03	
And under the operations of said last mentioned amendatory act and an act passed April 26, 1898, entitled "An act making appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," the further sum of	1,051 00	
		1,099 03
Making total additions to the endowment fund under these acts		$12,627 83

The suits mentioned in former reports growing out of a contract made with the late Mr. Sam Kendrick, for the discovery of undiscovered lands in the Virginia Military District of Ohio are still undisposed of.

One of them, the case of N. W. Evans against the Board of Trustees was tried in January, 1898, and has not yet been decided.

BONDED INDEBTEDNESS.

The bonded indebtedness of the University June 30, 1897, was $230,000.

In the last annual report mention was made of the fact that on June 29, 1897, notice was given of the sale of $100,000 additional four and one half per cent. certificates of indebtedness to be issued under act of the general assembly passed April 17, 1896, entitled "An act to authorize the board of trustees of the Ohio State University to issue certificates of indebtedness for certain purposes therein named," and their sale August 4, 1897, at a premium of 4.310, which made them equivalent to a 3.41 bond.

When this sale was made it was hoped that the funds realized therefrom would, with those remaining from the former issue under said last mentioned act, complete and equip the buildings under contract.

Later in the season, as the buildings neared completion, it was found that a further issue would be necessary to complete and fully equip them, and an additional $50,000 certificates authorized by said act were duly advertised and sold December 17, 1897, at a premium which made them equivalent to a 3.38 bond.

This made the outstanding indebtedness of the University $380,000, of which $80,000 bears interest at six per cent. and $300,000 at four and one-half per cent. per annum, the total interest charge being $18,300.

Under and by the terms of the several acts authorizing these issues said certificates of indebtedness became due and payable as follows: $10,000, June 1, 1898; $25,000, Dec. 1, 1898; $10,000, June 1, 1899; $55,000, Dec. 1, 1899; $10,000, June 1, 1900; $55,000, Dec. 1, 1900; $10,000, June 1, 1901; $55,000, Dec. 1, 1901; $10,000, June 1, 1902; $55,000, Dec. 1, 1902; $10,000, June 1, 1903; $55,000, Dec. 1, 1903; $10,000, June 1, 1904; $10,000, June 1, 1905.

After the issues were all made further consideration of the scheme of payment led the trustees to doubt whether payments could be promptly met without curtailing the teaching force of the University and crippling its work. They therefore persented the matter to the general assembly and on the 23d day of April, 1898, an act was passed entitled "An act to authorize the board of trustees of the Ohio State University to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due." This act provides in substance that portions of the bonded indebtedness falling due each year may be refunded so as to make the amount payable each year only $25,000. By this arrangement the period in which the indebtedness will be wholly paid is extended to 1912.

Under the refunding act above mentioned $10,000 six per cent. certificates falling due June 1, 1898, were refunded by an issue of the same amount of four and one-half, per cent. bonds falling due December 1,1904.

Said refunding bonds were duly advertised and were sold at a premium which reduced the annual interest thereon to about 3.31 per cent.

THE PAGE WILL.

After the decision by the Supreme Court mentioned in the last annual report, in the case involving the validity of the devise to the University in the will of the late Hon. Henry F. Page, his widow, Charlotte G. Page, sent a communication to the trustees expressing a desire to relinquish to the University any interest she might have in the lands mentioned in said devise, and afterwards duly executed and delivered to the trustees her quitclaim deed for any interest or claim she had or might have to said lands, which deed was duly recorded in the counties in which the lands lie.

Thereupon the trustees formally released to Mrs. Page during her life all claim of the University to one-half of the income of said lands from the date of her daughter Isabel's death, and also formally requested the executors of Henry F. Page to pay to Mrs. Page the sum of $1,732-26, the amount found in their hands on final settlement of his estate, for the purpose of providing a monument for her deceased husband.

Mrs. Page died shortly after the execution and delivery of the instrument before mentioned, and by the terms of said will the title to the lands and the income thereof vested in the University.

Notwithstanding the decision of the Supreme Court above mentioned, the collateral kindred of Mr. Page still asserted a claim to the lands and a portion of the income thereof, and the trustees under the will filed a suit in the common pleas court of Pickaway county, setting up the conflicting claims of the parties in interest and asking the court's decision thereon, which suit is still pending.

In the meantime, one of the trustees under the will, by agreement of parties, has been appointed receiver and is managing the lands, collecting the rents and holding them until the determination of such suit.

THE NEW BUILDINGS.

In the last annual report mention was made of the abandonment of work on the new buildings by the contractors and of the steps taken by the trustees to complete the buildings in accordance with the statute in such cases made and provided. The work was continued during the year, and pressed vigorously to completion. The cost of each of the buildings has been largely in excess of the contract price, and for the amount of such excess the University has a legal claim against the contractors and their bondsmen. During the year the following sums have been expended on said buildings: Townshend Hall, $76,771.62; Armory and Gymnasium, $98,936.76; Biological Building, $46,218.39.

The excellence of the material and workmanship of these buildings is in striking contrast with that of other buildings erected under the usual contract plan and suggests the question whether it would not be better to amend the public building law so as to avoid the ruinous competition which often results in the successful contractor being compelled to stint his work or suffer great pecuniary loss.

If the law could be amended so as to give the trustees full power to purchase the material and employ the labor necessary for the erection of public buildings, with due safeguards to the rights of employers and employed and against favoritism and fraud, the buildings would be better built and the interests of the state would be better subserved.

EQUIPMENT OF THE BUILDINGS.

All the new buildings have been equipped with the necessary furniture and lecture-room and laboratory apparatus and appliances, except the gymnasium. In the latter a running track and overhead apparatus are yet needed, but these have been provided for in next year's budget.

The cost of said equipment has been as follows: Townshend Hall, $12,342.28; Biological Building, $6,467.43; Armory and Gymnasium, $5,663.91.

THE CAMPUS.

During the year just closed the sum of $1,617.60 was expended in caring for the campus, and in grading about the new buildings.

No unusual improvements were undertaken, the funds being needed elsewhere.

Much remains to be done to carry out the plans of the landscape gardener and put the grounds in symmetrical shape. New walks and drives are needed and some grading will be necessary to make the approaches to the new buildings presentable.

The plans contemplate a botanical garden and arboretum, and it seems practicable to soon begin this work. It will take time, and considerable outlay, but the comparatively small sums which have been and will continue to be expended from year to year will soon make the University grounds among the most attractive in the state.

The trustees again express the hope that some public spirited citizen will provide the funds for an arched gateway at one of the entrances of the University grounds and in so doing build for himself an enduring monument.

THE COLLEGE OF LAW.

When the school of law was established in 1890 its only support was the fees of its students. In 1894, the legislature, unasked by the trustees, passed an act authorizing an appropriation from the State University levy of a sum not exceeding $5,000 annually for its support and maintenance. The trustees interpreting such action by the legislature as a desire on its part that a sum additional to the fees of its students should be expended for its benefit, annually, until last year, appropriated the sum of $1,500 in addition to the fees, which sum was expended towards meeting the salaries of teachers and lecturers. During the year just closed this appropriation was omitted, and the fees received from the students paid all the expenses of the college and left in the general treasury a surplus of $700.

Since its organization the college has grown in popularity and usefulness. The excellent character of the instruction given is evidenced by the fact alluded to in the President's report that in the examinations

before the supreme court the average grade of our students was higher than that of any other institution.

The trustees renew the acknowledgments of the University to the members of the bar of the state who in the early days of the college gave their services as teachers and lecturers with little or no compensation, to Mr. Emerson McMillin who generously gave the sum of $3,000 for the purchase of books for a law library, and to the late Hon. Henry C. Noble and Hon. L. J. Critchfield who added to this purchase their valuable private libraries.

THE W. J. BRYAN GIFT.

On the 6th day of April, 1898, the Hon. W. J. Bryan addressed a letter to the President of the University stating that he proposed "to give the University, if agreeable to the trustees, $250, the same to be invested and the annual proceeds used as a prize for the best essay discussing the principles which underlie our form of government."

The trustees promptly signified their willingness to accept such gift and their appreciation thereof and Mr. Bryan sent a draft for the amount.

Under and in pursuance of section 4105–15 of the Revised Statutes of Ohio, on July 20, 1898, said sum was certified into the treasury and made a part of the irreducible debt of the state.

The interest thereon will be faithfully applied to the laudable purpose for which it is intended by the donor.

This gift and the manner in which the law provides for its investment should arrest the attention of those who wish to aid the University. Citizens of the state who may wish to endow professorships, fellowships or scholarships in the University may be assured of the absolute security and permanence of their investments. The law provides that unless otherwise directed by the donor, all moneys granted to the University shall be paid into the state treasury and added to the irreducible debt of the state upon which is paid interest at the rate of six per cent. per annum payable semi-annually. What better investment can be made of surplus wealth, than the endowment of fellowships or scholarships to be granted to the worthy, deserving and often needy young men and women who are seeking an education? and who can measure the influence of even a small sum so invested and wisely applied?

THE LIBRARY.

The expenditures for the library during the year just closed exclusive of salaries of the librarian and assistants have been $3,620.98. A small portion of this sum was spent for ordinary supplies such as library cards, stationery, etc., but the bulk of it was expended for books, periodicals and binding.

The report of the librarian shows that the number of accessions during the year was 1653 and that the total number of books in the library June 30, 1898, was 23,339 and of pamphlets approximately 7,000. The trustees share the feeling of the librarian that the number is very small in comparison with the needs of the institution, but hope that the financial condition will soon permit larger appropriations for books.

A cheering and encouraging fact in connection with this important department was the organization, during the last year, of the University Library Association, made up of graduates, students, ex-students and others, with the avowed purpose of adding to the collection of books, maps, etc. Through the efforts of this association, 371 volumes have already been added to the library and it promises to be an important factor in strengthening this weak point in the University economy. The trustees take pleasure in acknowledging the obligation of the University to the members of this association for their very commendable and valuable efforts.

SIEBERT LIBRARY.

On June 13, 1898, Messrs. John Siebert, Louis Siebert and Wilbur H. Siebert, of Columbus, submitted to the trustees the following instrument:

PARIS, ILLINOIS, March 23, 1898.

I, William Siebert, do hereby give and donate to the Ohio State University located at the city of Columbus in the state of Ohio, my entire library (except such bequests as are hereinafter mentioned). Said library consists of historical, scientific, religious and other works of both the English and German languages and of pictures, plates and maps.

It is my will and this gift is made upon the fulfillment of that condition, that my said library be placed in a separate alcove in the library of the Ohio State University, and such alcove to be named and known as the "William Siebert Alcove," and said alcove to be kept in good order, and books within it to be kept intact and properly catalogued and labelled for use of the professors, students and scholars of the University.

I also direct that before the removal of my library to the University that my dear wife Emma S. Siebert be allowed to select not over fifteen volumes, and such other books and pictures as in the judgment of my brother and nephew (hereinafter named) may not injure the usefulness of said library.

I also desire that other members of my immediate family be permitted to select such mementoes as they may desire, but with the approval of my said brother and nephew, the homogeneity and usefulness of said library always to be kept in view.

I hereby appoint my nephew Wilbur H. Siebert and my brothers John Siebert and Louis Siebert, all of Columbus, Ohio, to carry out my wishes and also as made known to them in verbal communication.

(Signed) WILLIAM SIEBERT.

I, Emma S. Siebert, heartily approve of the above action of my dearly beloved husband and it will be my pleasure and duty to keep the library together and in good order as long as it will remain under my care.

(Signed) EMMA S. SIEBERT.

Witnesses to both signatures:
HATTIE MCCORD.

The Messrs. Siebert who presented the instrument, in so doing stated that if the trustees should think it wise and proper to assure them of the establishment of a "William Siebert Alcove" in the University library in accordance with the proposed donation, a part of the collections therein described would become immediately available, and that the alcove would receive frequent additions of well selected books on European history from other members of the Siebert family.

The trustees promptly passed a resolution establishing the "William Siebert Alcove" and it is understood that a portion of the collection will be placed therein ready for use during the next academic year.

The Siebert Library is said to contain about 3,000 volumes, and taken in connection with the generous offer of the Messrs. Siebert to make frequent additions thereto of well selected books in European history, is one of the most valuable gifts the University has received. The trustees desire to make public acknowledgment to the donors for this most liberal and generous gift.

LIBRARY OF PROFESSOR D. S. KELLICOTT.

Professor David S. Kellicott a day or two before his death made a will in which he bequeathed his scientific library, about four hundred volumes, to the University to form the nucleus of a departmental library for the department of Zoology and Entomology, over which he has so long and so ably presided, thus testifying by one of the last acts of his life his devotion to science and to the institution he served so well. Words can but feebly express a proper appreciation of this generous bequest. The books have been received and placed in cases in said department.

DEGREES.

At the commencement in June, 1898, on the recommendation of the Faculty, the following degrees were conferred:

ADVANCED DEGREES.

MASTER OF ARTS.

Jesse Harliaman Coursault, B. A., Columbus; Alexander Milne, B. D., (Yale University), Columbus; George Washington Rightmire, B. Ph., Columbus; Frederick Lewis Turner, B. A., Columbus.

MASTER OF SCIENCE.

Edward Lawrence Fullmer, B. Sc., Defiance; Lumina Cotton Riddle, B. Sc., Columbus.

MASTER OF SCIENCE (In Agriculture).

Charles William Burkett, B. Sc. (Agr.), Columbus; Ernest Jacob Riggs, B. Sc. (H. and F.), Angola.

MASTER IN PHARMACY.

William Lisle Stump, G. Ph., Nashport.

FIRST DEGREES.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE.

BACHELOR OF SCIENCE (In Agriculture).

John Carr Britton, Columbus; George A. Flickinger, York; Carl James Miller, Franklin; Albert Warren Nettleton, Medina; Chalmer Kirk McClelland, Andover.

BACHELOR OF SCIENCE (In Horticulture and Forestry).

William C. Mills, Mt. Vernon; Clarence William Waid, Emery.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

BACHELOR OF ARTS.

Gay Bancroft, Columbus; William Hartwell Butterworth, Columbus; Ruth Lanissa Ford, Ashtabula; Levi Leedy Garber, Belleville; Ivy Kellerman, Columbus; Harriet Rebecca Kirby, Columbus; Walter B. Lyndenberg, Dayton; Caroline Lynas, Columbus; Charles Edmund Lynas, Columbus; Leonard Roland Martell, Columbus; Blanche Moss, Columbus; John Bernard Parker, Danville; Anna Dickson Prall, Columbus; Mabel Elise Rice, Columbus; Wallace Bates Shield, Kansas City, Mo.; Ella Underwood, Columbus; Mary Grace Vance, Columbus; Julius Franklin Vornholt, New Bremen.

BACHELOR OF PHILOSOPHY (Latin Course).

Helen M. Barlow, Columbus; Mary Elizabeth Bodman, Bement, Ill.; Harley Brelsford, Christiansburg; Ida Louise Feiel, Columbus; William Erskine Kellicott, Columbus; Donald Alexis Kohr, Westerville; Herbert Zettler Krumm, Columbus; Blanche Dell Mickey, Columbus; Mary Glisson Redick, Findlay; Margaret Sutherland, Columbus.

BACHELOR OF PHILOSOPHY (Modern Language Course).

Berthold August Eisenlohr, Columbus; Florence Danford Harvey, Mt. Perry; Edith Selma Herms, Portsmouth.

BACHELOR OF PHILOSPHY (English Course).

Orsamus Drake Beardsley, Garrettsville; George Craig Dietrich, Piketon; Frank Carleton Doan, Columbus; Stanley Hamer Ford, Columbus; Charles Haywood Fullerton, Wheelersburg; Genevieve Gray, Columbus; William H. Hartsough, Jr., Columbus; Bird Hazelton, New Straitsville; Quintin R. Lane, Canal Winchester; Zella Vina Robinson, Columbus; Carey Lucas Shuck, Vanlue; Olive L. Shurtz, Columbus; John E. Sylvester, Jr., Wellston; Herbert Swan Talbot, Columbus.

BACHELOR OF SCIENCE.

Robert Fischer, Columbus; John Conrad Fitterer, Butler; Charles Edmund Haigler, Jeffersonville; Herbert Bailey Harrop, Columbus; Edwin George Hastings, Austinburg; Theodore S. Munson, Zanesville; Raymond Carroll Osburn, Columbus; Edward Bruce Williamson, Bluffton, Ind.; John Homer Pumphrey, Clayton; Samuel Eugene Rasor, Clayton.

COLLEGE OF ENGINEERING.

CIVIL ENGINEER.

Charles London Barnaby, Columbus; Harry Holbrooke Barrows, Columbus; John Wesley Groves, Batavia; Albert Joseph Wise, Suffield; Benjamin Harrison Flynn, Columbus; Adelbert Andrew Henderson, Olentangy; Harry Marshall Urban, Ashland; Clyde Tucker Morris, Columbus.

MECHANICAL ENGINEER (In Electrical Engineering).

Walter Evans Chappell, Barnesville; Emery Eugene Graham, Richwood; Fred. Alan Fish, Milan; Frank Leslie Estep, Jeffersonville; Strafford Reaves Hewitt, Columbus; John Merton Hipple, Jefferson; Arthur James Jones, Fitz Henry, Pa.; Guy Carlton Fergus, Tadmor; Louis Ralph Krumm, Columbus; Alfred Heber McIntire, Mt. Vernon.

MECHANICAL ENGINEER.

Edwin Ebert Arnold, Zanesville; Charles Artemis Grate, Yale; Frederick James Hale, Mogadore; Carl Marble Ruhlen, Fort Riley, Kas.; Arthur Edward Knecht, Cincinnati.

ENGINEER OF MINES.

Stanton Sholes Freeman, Columbus; Cyrus Swan Roberts, Columbus.

BACHELOR OF SCIENCE (In Industrial Arts).

Charles William Weick, Columbus.

COLLEGE OF LAW.

BACHELOR OF LAWS.

John Ezra Baker, A. B., St. Paris; James Burt Baker, Ph. M. (Mt. Hope College), Salem; Harrison William Bock, Canton; Sherman Delivan Callender, Ph. B. (Oberlin College), Hartsgrove; Jesse Peck Dice, Akron; Jessie Albertus Fenner, A. B. (Wittenberg College), Shiloh; Israel Moore Foster, Athens; William Augustus Garst, A. B. (Otterbein University, Harvard University), Westerville; Benjamin Lincoln Griffiths, Vaughnsville; William Preston Heacock, Cardington; Clark Samuel Hovey, B. A. (Buchtel College), Akron; Charles Schwenker Martin Krumm, B. Ph., Columbus; John Cooper Loomis, Tiffin; Charles Wesley Merrill, A. B. (Denison University), Granville; Clarence Coulter Middleswart, A. B. (Marietta College), Constitution; Bert La Forrest Mull, Columbus; Rufus Harry Patchin; Chardon; Charles Foster Pryor, Barnesville; Frederick Nicholas Sinks, Ph. B. (Yale University), Columbus; Edward Trevitt Smith, Holden, Mo.; William Edgar Sykes, Marietta; McAllister Wilcox, Sunbury.

COLLEGE OF PHARMACY.

GRADUATE IN PHARMACY.

Larone Allen Bunnell, Waynesville; William Bartlett Calkins, Columbus; Clement Jay Logsdon, Columbus; William Moss, Buffalo; Clarence Elmer Smith, Massillon; Edward Everett Somermeir, Columbus; Frances Henry Obetz, Columbus. (As of the Class of 1896.)

THE FACULTY.

The changes in the faculty since the last annual report are noted in the report of the President.

We join in the tribute paid by the President to the memory of the late Professor David S. Kellicott whose untimely death during the year is so sincerely deplored. In his death the University has lost one of its most able and inspiring teachers, and his associates a most lovable and valued friend. His quiet, earnest, unselfish devotion to the cause of science was an inspiration to all who come within the sphere of his influence. The lives and characters of such men are a part of the priceless endowment of the University which no change of time, place, or circumstance can wholly destroy.

Another notable loss in the faculty is that of Professor A. L. Williston, Director of the Department of Industrial Arts, who has been called to the famous Pratt Institute, Brooklyn, New York, at a much larger salary than the trustees of the University are authorized to pay.

Professor Herbert Osborn of the Agricultural College at Ames, Iowa, has been elected to succeed Professor Kellicott, and Professor Frank E. Sanborn, late of Tuft's College, Mass., to succeed Professor Williston.

The number of professors in the academic faculty is 30; associate professors 5; assistant professors 12; lecturers 1; assistants 23; fellows and laboratory assistants 12; librarian 1, assistant librarians, 3 curators 1,

Their positions and compensation and that of the other employes are stated elsewhere in the report.

The law faculty consists of the Dean, four professors and three lecturers, whose compensation is also given in another part of this report.

NUMBER OF STUDENTS.

The enrollment of students during the year was as follows:

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

First semester, 381. Second semester, 358.

OTHER COLLEGES.

Fall Term, 596. Winter Term, 586. Spring Term, 487.

The whole number in attendance during the year as shown by the catalogue including those in attendance at the summer school and those who attended the pedagogical conference held at the University in the summer of 1897 was 1150.

The numbers in the several departments and classes and the courses of study pursued in each are shown in the appendix to the report of the President, and the catalogue, which are made a part of this report.

GIFTS DURING THE YEAR.

Besides those specially mentioned in the preceding pages of this report, the University has received by gift the following additions to its museums and collections.

DEPARTMENT OF AGRICULTURAL CHEMISTRY.

Twelve bottles of coal tar colors used in coloring food, by Dr. F. B. McNeal; value $6.00.

Eighteen glass jars of fertilizers by Armour & Co.; value $18.00.

Four bottles with preparations of pepsin and pancreative; value $20.00.

One set Dutch standards for sugar, by Dr. Ed. Sherer, New York; value $20.00.

Eighteen samples raw sugar, by Dr. Ed. Sherer, New York; value $1.00.

Two samples Holland sugar, by Dr. Sherer.

One box phosphate rocks, by M. A. Scovell, Lexington, Ky.

ASTRONOMY.

Two glass photographs of the solar eclipse of Jan. 21, 1898, from Lick Observatory.

One incomplete set of duplications of the Dorpat Observatory, Dorpat, Russia.

Current numbers of the Harvard Annals, from Harvard College Observatory.

One stellar tellurian, from Mr. C. S. Powell, Cleveland, O.

BOTANICAL DEPARTMENT.

W. H. Aiken, College Hill, Cincinnati, 10 botanical specimens.

G. D. Lind, Lebanon, 15 botanical specimens.

A. Wetzstein, St. Mary's, 50 botanical specimens.

F. J. Tyler, Perry, 25 botanical specimens.

J. R. Watson, Berea, 170 botanical specimens.

E. L. Fullmer, Defiance, 50 botanical specimens.

F. L. Stevens, Columbus, 25 botanical specimens.

Ruth E. Brockett, Rio Grande, 24 botanical specimens.

E. S. Meany, Seattle, Washington, seeds of 32 plants.

Arnold Arboretum, seeds of 13 plants.

Royal Botanical Garden, Edinburg, seeds of 25 plants.

Michigan Agricultural College (per Professor Beal), seeds of 52 plants.

Michigan Agricultural College (per Professor Beal), 48 living plants, grasses.

ELECTRICAL DEPARTMENT.

One Milde Transmitter, from Standard Telephone Co., Madison, Wis.

One collection of armature stampings, C. F. Scott.

ECONOMICS AND SOCIOLOGY.

Fellowship in Economics, $250 per year for three years, by Emerson McMillin value $750.00.

Pledge for periodicals, etc., Emerson McMillin, $250.

GEOLOGY.

Bedford Stone Co.
J. A. Bownocker.
Mrs. Jos. Bradford.
J. E. Clum.
Geo. Cole.
Craig Stone Co.
W. M. Donnelly.
Evans Marble Co.
Rev. Dr. Frazee.
J. J. Janney.
Elisha L. Lambert.
Hon. H. L. Chapman.
Clarence Loveberry.
Dr. R. W. McFarland.
Hon. H. C. Miller.
W. C. Mills.
Prof. G. W. Mesloh.
Prof. S. B. Newberry.
W. K. Moorehead.
Ohio Arch. & Hist. Society.
Prof. E. Orton, Jr.
Sam'l T. Orton.
Taylor & Beall Co.
D. C. Thomas.
F. J. Tyler.
U. S. National Museum.
Mrs. C. C. Waite.
E. B. Willard.

These donations have varied widely in value. They consist of minerals, rocks and fossils. In many cases there is no such thing as market value. Their value may be roughly estimated at $250.00.

MECHANICAL ENGINEERING.

Lane sectional pressure gauge and sectional pop safety valve, from Ashton Valve Co., Boston.

No. 5 hydraulic ram, from Humphryes Mfg. Co., Salem, Ohio.

Two-foot water turbine, James W. See, Hamilton, Ohio.

A balanced valve specially made for the Buffalo Forge Co.'s engine, from American Balance Valve Co.

Para pneumatic pulley, Geo. V. Cresson Co., Philadelphia.

An American pulley, American Pulley Co., Philadelphia.

Large and small models of the Gilbert woodsplit pulley, Saginaw Mfg. Co., Saginaw, Mich.

Steel balls and hardened steel plates from Cleveland Machine Screw Co., Cleveland, Ohio, and from Pope Mfg. Co., Hartford, Conn.

Steel balls for a thesis investigation, from Fitchburg Steel Ball Co., Fitchburg, Mass., and from Simons Rolling Machine Co., Fitchburg, Mass.

Samples of material from Gandy Belting Co., Baltimore; Chesapeake Belting Co., Baltimore; Chicago Rawhide Mfg. Co., Chicago; Main Belting Co., Philadelphia; N. Y. Belting & Packing Co., New York. Photographs and blue prints have been received from Clonbrock Steam Boiler Co., Brooklyn, N. Y.; Niles Tool Works, Hamilton, Ohio; Lodge and Shipley Machine Tool Co., Cincinnati; Ball Engine Co., Erie, Pa.; Pond Machine Tool Co., Plainfield, N. J.; Fitchburg Machine Co., Fitchburg, Conn., and from other friends of the department.

PHARMACY.

One set of botanic drugs, Kauffman-Lattimer Co., Columbus; value $25.00.

ZOOLOGY AND ENTOMOLOGY.

Entomological works from library of late Dr. D. S. Kellicott, from Mrs. Kellicott, Columbus.

Hippopotamus, peccary, tapir and skull, Sells Bros. Menagerie, Columbus, Ohio.
Rattlesnake skin, Dr. R. L. Sweeney, Marion, Ohio.
Eggs of 10 species of birds, C. B. Morrey.
Eggs of 50 species of birds, J. S. Hine, Columbus.
Many specimens of eggs, crayfish and fishes, E. B. Williamson and R. C. Osborn.
Eggs, J. B. Parker.
Skulls and small mammals, E. E. Masterman.
Varieties of honey bees, Frank Benton, Washington, D. C.
Right humerus of mastodon, Dr. J. B. Schueller.

The following are the estimates for the year ending June 30, 1899:

Salaries	$141,155 00
Expenses of trustees	600 00
Fuel and light	7,000 00
Repairs	8,500 00
Printing and advertising	2,100 00
Library	7,577 21
Roads and grounds	3,500 00
Virginia military lands	1,000 00
Bonds and interest	43,300 00
Department supplies and apparatus	35,000 00
Incidentals	6,000 00
Total	$255,732 21

which the anticipated income of the University will be ample to meet.

The report of the treasurer and the annual catalogue for the year ending June 30, 1898, are filed herewith and made a part of this report.

Respectfully submitted,

ALEXIS COPE, Secretary.

The President's Report

To the President and Members of the Board of Trustees:

GENTLEMEN: The year which closed with the last day of June has gone quickly because it has been a very full year, in every sense of the words. While there was much that disturbed us all, in the delay in finishing the new buildings; the occupation of Townshend Hall after the mid-winter holidays, brought great relief to departments no longer overcrowded—for the first time since their establishment: the opening of the Gymnasium and Armory gave new life to the work of the Cadet Battalion as well as to all University athletics: and the much later occupation of the Biological Building placed two departments in exceptionally ample and well-equipped quarters, and gave the Faculty and the Executive department rooms in convenience and comfort somewhat commensurate with the work in hand. The changes have also made it possible to grant more and much needed room to other departments, the results of which will more properly form a part of the next annual report.

In this connection it is not out of place to note that much of the expense of departmental work in this University, and much of the demand for more room, is due to the fact that we have thus far been exceptionally fortunate in being able to keep the number of students in each division of classes such as to secure the very best educational results. In this respect we are certainly far in advance of many State Universities of similar grade, and of nearly all other institutions which have an enrollment at all equal to our own. We rarely have more than thirty or thirty-five in a division, while many institutions undertake work with twice this number: and in some the number runs to a hundred and even more. The pedagogical unwisdom of this is too apparent to need comment. It is unfortunate that the general public does not know this more often than it does, and with a more intelligent appreciation of what such crowding means.

The relations existing between students and Faculty have again been very satisfactory, and the year closes with a record of practically no call for "discipline" in the usual sense of the word. Some few students have gone home before the close of the year because they did not appreciate what the state is doing for them, nor the exceptional opportunities

offered here: but there has been no lawlessness and no "outbreak" and no conduct that has caused serious or prolonged anxiety. The general tone of student life has been clean and wholesome and industrious: possibly the first two because of the last. This is only natural, and is one of the distinct advantages of connection with a large and growing institution, situated in a city of sufficient size to prevent the University and its people imagining that the world necessarily turns around themselves and their interests. The effect of the orderly, systematic and busy life of a large city is always wholesome to those who are open to wholesome influences: and the temptations that ordinarily affect the life and work of a student are distinctly less than in the smaller community. It is well to remember that a student is at the University not more to prepare for life than to begin life. The day has passed in which higher education may properly withdraw itself from the world, or from the people. It has come out of the cloister and the monastery, and has discarded cap and gown, and now stands in the mart and in the thickest of everyday life, and is in its shirtsleeves—ready for service. It is this that is so rapidly blotting out the line once clearly drawn between the student and the world: and it is because this line is so largely obliterated that there is no longer such a frightful fall from Commencement exercises to the after daily life. If the graduate is to be in the world (though not of the world) he cannot get in too soon nor keep too close a touch. Sound education puts an end to all exclusiveness and seclusiveness: and the Universities are doing more than any other factor in American life to bring to the American people a sense of unity of interest and of general equality in right of way.

ATTENDANCE

The total attendance for the year has been eleven hundred and fifty. This is a gain of a shade more than twelve and one-half per cent, which is almost exactly the increase of last year. The greatest gain is in the College of Agriculture and Domestic Science—quite fifty per cent: and in the College of Law. The first is clearly due to the erection of Townshend Hall and to the establishment of the Course in Domestic Science—which is attracting favorable mention not only in Ohio but far outside of our borders. The latter is largely because of the increasing appreciation of the very high grade of work done in that College, and of the success of our students in passing the examinations of the Supreme Court. At the last of these examinations the results were as follows: This University presented 34 candidates, of which 1 failed: A, 15 candidates, 1 failed: B, 13 candidates, 1 failed: C, 41 candidates, 13 failed: D, 18 candidates, 15 failed. It would be scarcely courteous to designate more specifically the less fortunate schools.

The number of young women enrolled during the year just closed has been two hundred and thirty-five, as against one hundred and

seventy-two in the year previous. This is peculiarly gratifying, and should bring encouragement to all interested in sound training for those who have such influence in the future of this state and this country. It has been thought that even this number would be greatly increased if the University would open a special dormitory for young women: but our way to this is not clear as yet—though it may become not only desirable but necessary. Meanwhile we ought to encourage the establishment near the campus of cottages devoted exclusively to student life. These can be made paying business enterprises, with the right persons in charge; and offer no small inducement to the investment of local and other capital. A block of such cottages, or a large modern compartment house, would bring sure and steady returns.

EFFECT OF THE WAR

The attendance always falls off in the spring, without waiting for the close of the University year: because of the home demands upon many of our students, or because of financial inability to complete the year. This year the gap made in our ranks was wider than usual because of the large number which responded to the call of their country and their state, enlisting for the war with Spain. While we regretted to have them leave, and while we felt almost the anxiety of parents as these dear boys went to the front, we could but feel that it was proper that this ready and hearty and generous response should be made by the graduates and students of an institution which is endowed and largely supported by the general government: in which for years, at the expense of the general government, young men have received special and efficient instruction in military science. It has been impossible to secure a full roster of those whose names are thus honorably connected with this great national movement in behalf of humanity and advancing civilization: but we know that the number is very large. It is estimated that in the Fourth Ohio alone, there are nearly two hundred graduates and ex-students. In Battery H, of one hundred and five men, we can claim thirty-five. All over the state, the men who have been within these walls responded with alacrity, and furnished some of the most intelligent and efficient soldiers that the state has ever known. Their usefulness has been recognized by the commissions issued to a large number who have no other claim than their personal merit. The University rejoices in the men who thus honor their Alma Mater in honoring the nation, the state and themselves. May they be safely returned to the equally useful and equally honorable duties of that which in this country is falsely called private life—for there can be no private life in a free republic: every man is born an officer of the state, and is responsible for law and order and peace and prosperity for all, through all.

SUCCESS OF NEW COURSES

It is hardly necessary to say that that to which the University gives its attention is successful: but it is entirely proper to speak of some work that is new with us, and of some that is entirely novel in the educational world. The latter includes the new Course in Domestic Science, an entire experiment as we have undertaken the work. That some of our own Faculty should even look upon this somewhat askance is not at all surprising: and that to many who knew of our purpose by hearsay only, it should seem unworthy of University recognition, is not good ground for complaint. But the year has completely demonstrated the wisdom of the undertaking, and of the methods employed. The dignity of the work, the soundness of the methods, the breadth and strength of treatment, the culture value as well as the practical value, the ease with which interest in all this can be excited and held, and the almost immediate confidence of the community at large—all this is a source of congratulation to all who have had this work in hand. If the present outlook is at all realized, the course will be overcrowded in the second year of its existence: in the face of the very clear understanding on the part of all that some of the hardest work in the University is done in this department. The Women's Clubs of the state are taking a great interest in all this: and the existence of this work, and the possibility of coming directly in touch with it, had much to do with the selection of Columbus as the place for the next annual meeting of the State Federation of these organizations. All this means that it will not be long before this Course will so develop that it will need a building of its own. It may not be too early for some generous citizen of Ohio to be thinking of this very practical benefaction.

The selection of a Director of Physical Training, and an Associate for this work with young women, has proved exceedingly wise action. Our students have entered upon these courses eagerly and intelligently. They have been more than willing to submit to wise counsel and to make haste slowly in all that pertains to their physical well-being. Careful physical examinations have been made of a very large number of students of both sexes, and though the work did not begin till the middle of the year the beneficial results of systematic and intelligent training were very visible at its close. Under the new rules of the Faculty, all who are to take part in any athletic event must first submit to a rigid physical examination. This has already turned from the heavier work in the field several who were not fit for this, and in place of this has given them prescription work under which they have gained daily and visibly in general physical condition. The Gymnasium and its workers are now the center of very intelligent University interest. There is no question that it was this renewed and more intelligent interest that made it possible for the students to secure the payment among themselves and from outsiders of nearly a thousand

dollars of old indebtedness, and to re-organize the Athletic Association upon a sound business basis.

It is possible that some may not clearly recognize the place and value of true sport and of the true sporting spirit in the life of the nation today. To such I commend most heartily an article in the July number of Outing, by Mr. Pierce Collier—one of the most sane and convincing statements that I have ever seen, on this somewhat vexed question. It is not without meaning and sense that Harvard—old and honored and conservative—should this year confer the honorary degree of master of arts upon the young Englishman who has done so much to further the interests of wholesome sport in this country. Nor is it unworthy of notice that England, the greatest sporting country in the world, far outruns those countries that seem to have forgotten that something intelligent and legitimate—even though somewhat artificial—must be found to take the place of the physical trials and training that are the natural experience of those deep in the early work of founding a great nation. Our mother country spends more than two hundred millions of dollars each year for sport, in addition to an even greater amount of fixed investment in the same direction: and our kinsmen across the sea are not apt to throw away their money on that which brings no adequate return. It should be noted that the greater part of this—practically all of it—is expended in connection with that sport which is clean and wholesome, and above all which is amateur sport in the best sense of the word. This is the true touchstone of all sport: it must combine training with diversion, and it must be honestly amateur. As Mr. Collier so wisely says in the last lines of his article: "Honest sport needs no apology: for professionalized sport there is no excuse."

A TEACHERS' COLLEGE

In its determination to wisely serve the state, and especially the educational needs of the state, the University established the department of Pedagogy. It has completely vindicated the wisdom of this action, if vindication were necessary. But this brings the University face to face with another and more vexing problem. The state of Ohio has no public normal colleges or schools—except those of three or four of its cities. The course in Pedagogy at the University cannot possibly take the place of sound and continuous normal training, with due opportunity for practice work, and is not intended to take this place. It is exceedingly beneficial and desirable and opportune: but it must not be though a substitute for the work in preparation for teaching which nearly every commonwealth in the union now sees clearly must be provided by the state. So complete is the recognition of this that sixteen states have one such public institution: eight have two: four have three: three have four: two have five: one has six: one has nine: and one has eleven. The value of such training is apparent at a glance. The day

of the teacher without such preparation has almost gone. Something of this is true even of those who hereafter teach in Colleges and Universities. That any well instructed person can teach is no longer recognized as a fact. We know that there are deep and philosophic foundations underlying all true and lasting instruction. We are no longer willing to entrust our children to those who are without either successful experience or special training. The child has but one chance, and that must not be thrown away. That there is much truth in the old saying that a teacher must be born such, goes without saying: but more than this is needed for the highest success. We must have thorough special training, accompanied with practice work under constant and competent criticism. The public welfare demands this in the common schools. We of the University cannot be assured of a sufficient foundation upon which to build wisely or safely, unless this has been laid by the hand of one who is skilled in such craftsmanship. In a word, Ohio has reached the point when this work cannot be longer delayed.

Unless the next legislature provides ways and means for founding and maintaining at least one Normal College of high grade, it is time that the University—burdened as it is with work already attempted—begins to think of enlarging the department of Pedagogy into the seventh College of the University: the Teachers' College. This will not be a Normal School, in the usual sense of the words. It will include work of a much higher grade. But it is work which we must consider soon in any event—and which we must consider at once if the state does not act.

DEGREES CONFERRED

The degrees conferred at the last Commencement were as follows: On men—Master of Arts, four: Master of Science, one: Master of Science in Agriculture, one: Master of Science in Horticulture and Forestry, one: Master of Pharmacy, one: Bachelor of Science in Agriculture, five: Bachelor of Science in Horticulture and Forestry, two: Bachelor of Arts, eight: Bachelor of Philosophy, fifteen: Bachelor of Science, ten: Civil Engineer, eight: Mechanical Engineer in Electrical Engineering, ten: Mechanical Engineer, five: Engineer of Mines, two: Bachelor of Science in Industrial Arts, one: Bachelor of Laws, twenty-two: Graduate in Pharmacy, seven. On women—Master of Science, one: Bachelor of Arts, ten: Bachelor of Philosophy, twelve. Total, one hundred and twenty-six.

By special action of the Faculty, all Seniors who were members of the National Guard at the time of the first call for volunteers, and who enlisted in the service of the general government under this call, were granted their diplomas as though completing their course and being present on Commencement Day. This generous and patriotic recognition of the patriotism of our students, deserves at least this word of appreciation and approval.

CHANGES IN THE FACULTY

Of the changes in the Faculty, that which is most constantly in mind and which is still most difficult to realize is the loss sustained by the death of Professor Kellicott. It seems impossible that we are not to see him again in his accustomed place, nor to hear his quiet words of counsel when these are needed. He was always considerate, always courteous, always helpful, always wise, in all University affairs. Though deep in his own department work, and none could show more complete devotion, he took thought for the interests and welfare of all: and with unusual unselfishness in matters that most nearly concern him, often gave way for that which he believed to be the betterment of the whole University. He always spoke plainly and decisively, but never bitterly: and if there was even one in the Faculty who by any stretch of the imagination could be called his enemy, the fact is not known. His modesty was as great as his ability, and his self-forgetfulness kept pace with his peculiar fitness for his work. He was not only a specialist of extended and approved reputation, but he was a true and successful teacher. He never forgot the outer world, and the outer world was the better because it had known him. When the tidings reached the campus that the long and heroic struggle which he had made for life had at last come to an end, each colleague and student who had known him felt a sense of personal loss that could scarcely have been deeper had we all been of one family.

It is no easy task to select one who is to follow such a man and to continue his work. The University is fortunate in securing Professor Herbert Osborn, of the State Agricultural College of Iowa; who comes to us with a national reputation as an Entomologist, and is especially strong in Economic Entomology—in addition to good equipment and experience in general Zoology.

Professor Williston, of the Department of Industrial Arts, resigned at the close of the year, to accept a more attractive position in Pratt Institute, Brooklyn. His successor is Professor Frank E. Sanborn, of Tufts College, Massachusetts: a classmate of Professor Williston at the Massachusetts Institute of Technology, and a successful instructor and organizer.

At last it has become possible to divide the work of the chair heretofore occupied by Professor Knight. The great and interesting interest in American History, and the rapidity with which that History is now being made, has been recognized by the establishment of a chair of American History and Political Science: which has been given to Professor Knight, who is remarkably equipped for this work. Indeed, it is his interest and success and marked ability in American History that has made the division not only possible but necessary. A new chair of Economics and Sociology has been created and assigned to Professor F.

C. Clark; action and recognition fully deserved. While Professor Knight remains temporarily in charge of European History, the advancement of Professor Siebert to the position of Associate Professor of European History and the creation of the Siebert Alcove in the University Library, through the generous bequest of Mr. William Siebert of Illinois —to be strengthened by the annual gifts of Mr. John Siebert of this city, give sufficient promise that the History of the Continent will in the near future occupy an independent position. When the chair of Economics and Sociology was established, Mr. Emerson McMillin increased the already great indebtedness of the University to his thoughtful generosity, by providing for a Fellowship in this department—for each of three years—two hundred and fifty dollars each year and has since contributed generously to the equipment of the department with a reference library.

The appointment of Hon. Paul Jones as a Trustee of the University was a wise recognition of a worthy man and of the graduates of the University; and has given great and general satisfaction. But this made necessary Mr. Jones' withdrawal from the Faculty of the College of Law. For the coming year his work has been entrusted to Professor Page of that Faculty.

We were sorry to lose from the same Faculty Hon. George K. Nash, who was compelled to withdraw because of the pressure of professional engagements.

Early in the winter Curator Moorehead, in charge of the Archæological collections, was obliged by the condition of his health to go to the extreme west for the remainder of the year. The collections were in the care of Miss Lucy Allen till late in the spring, when Mr. W. C. Mills was appointed curator.

Mr. Bruce, who has taught with unusual success for several years in the department of Romance Languages, received leave of absence for a year—which he will spend abroad in further study. Meanwhile his place will be taken by Mr. Murray P. Brush, who comes to us with exceptional preparation for this work.

Mr. Evans, of the department of Ceramics, withdrew, about the middle of the year to accept a position in Colorado Springs. His place was filled by Mr. Theodore L. Griffin, whose long experience in this work enabled him to render good service till the close of the year.

Mr. Burkett, of the department of Agriculture, withdrew at the close of the year to accept an advanced position in the State Agricultural College of New Hampshire.

ASSISTANTS AND FELLOWS

There have been the usual changes in these minor positions; due chiefly to the desire of those holding such positions to complete their graduate work elsewhere, or because of their recognition by other insti-

tutions with calls to more important positions. This is entirely in accordance with the policy laid down by yourselves at the May meeting. The position which you then assumed was that under the present conditions it is not your policy nor your desire that the position of assistant or instructor in the University should be regarded as a permanent situation: that these places are and under present conditions ought to be somewhat in the nature of advanced Fellowships; that it is your policy and desire that they should be filled by young men of ability and high character, who propose to make teaching their life work, and seek opportunity for practice under competent supervision; that as these assistants attain experience in this work and ability to conduct a department, it is your policy, if they cannot be advanced here, that they should seek a wider sphere of usefulness and give place here to others seeking the requisite training.

This action should not be misunderstood. The University is anxious to recognize its own graduates, and favors them and expresses its confidence in them in all possible and proper ways. But the University cannot find positions for all who desire to continue in educational work: nor is it able to offer to all such that advancement in position and salary which the proper ambition and the proper recognition of true worth demand. It is very natural that a graduate desires to linger in the pleasant places which he knows so well, and it is just as natural for the University to give preference to those whom it has trained and in whom it has deep interest. But there ought to be sufficient promise of advancement to keep every man continually at his best effort: and this, of course, the University cannot offer to all. Many of the appointments here, therefore, must be regarded as exceptional opportunities for practice work under expert criticism: by means of which our graduates will find advancement—here certainly when opportunity may arise; but elsewhere more often, as a matter of course. There is natural regret when our educational children must turn from the old home—but there is a proper pride in their greater success elsewhere. This University has already sent out some of the most competent workers in the educational world.

A NEW PROFESSION

The law of demand and supply is at work in education as well as in business life. In fact the demands of the business world create the necessity for supplies of education to carry it on. *To day as never before business has become one of the leading professions.* More and more young men and women go out from college halls into business pursuits. It is the duty, therefore, of the state to equip its young people for this profession as well as for law, for medicine or for engineering. In point of fact the latter professions depend for their success upon the former. All the varied interests of the state unite in this demand. To meet it the University should offer courses so arranged and grouped as to thor-

oughly prepare those desiring to specialize along lines of Commerce and Administration.

The reasonableness of such work, the persistence of the demand on the part of the business men of this state, and the opportuneness of the times, render the establishment of a regular, four years' course in Commerce and Administration almost imperative. Within the past year the University of California has founded a department of Commerce; and more recently the University of Chicago has created a separate College of Commerce and Politics. Ohio cannot afford to lag behind in such a movement, in this industrial age. The business men of Columbus, members of the Board of Trade, have given a substantial proof of their interest, in the form of over one thousand dollars to equip the department of Economics for this kind of work. Reference has already been made to the Emerson McMillin fellowship, in the same direction. Students looking forward to a business course—banking, merchandising, insurance, accounting, statistical work, the consular or civil service, public or private administration, etc.—may obtain such a grasp of business principles and practice through the methods of instruction employed that they will not have to "unlearn" anything when they step out into active life. On the contrary, they will find themselves, like the college-trained engineer, better equipped even than those who have come all the way up through the ranks. It is our good fortune as a University to be located in the midst of a great industrial laboratory—as Columbus has been justly termed; and also in the midst of the greatest of the central-western manufacturing and commercial states. The University therefore should be as rich in educational opportunities and as far reaching in influence as we are in industrial resources. Our engineers are in Corea—why not our merchants and bankers in China; and our Ohio boys as Consuls in Cape Colony? The new era now dawning upon us as a nation is a commercial era. It makes the preparation of men and women for business careers at home and abroad, a matter of prime importance. Only by meeting the demand can the University prosper.

INVESTIGATION AND RESEARCH

It is to be confessed with regret that the members of our Faculty have very little time for original work. Until we can have practically two Faculties—one for instruction and one for investigation and research—we must give our time and strength almost entirely to instruction. But in spite of the demands made upon them in this direction, our instructors manage to find time—or to make time—for some outside work each year. During the year just closed the Faculty has been well represented in the current literature of the day—especially in the magazines devoted to science. Members have also taken active part in the work of local organizations. Some of the best work accomplished for and by the State Board of Health has been performed by University men. The expert

services of Dr. Orton, and of Professors Brown, N. W. Lord, Weber, McPherson, Thomas, Ray, Magruder, and others of the Faculty of the College of Engineering have been in constant demand.

The Faculty of the College of Agriculture has furnished lecturers for Institute work, under the general direction of the State Board of Agriculture: sending such men as Professors Hunt, Lazenby, Kellerman and Gibbs, Assistant Burkett and others. The Arts Faculty has been called upon for lectures before reading clubs and teachers' organizations: in which work especial recognition should be given to Professors Scott, Knight, Gordy, Denney, Eggers, Smith, Barrows and Clark. Dr. White, of the College of Veterinary Medicine, has done Institute work. Members of the Law Faculty, notably perhaps Professor Randall and Judge Pugh, have been in demand for public occasions.

Of more formal work it may be noticed that Professor Gordy completed the second volume of his "History of Political Parties in the United States:" Professor Bowen published a text book—"First Italian Readings:" Professor Knight wrote the text of the beautifully illustrated "History of Columbus" which appeared last winter: Professor Siebert completed his volume on the old "Underground Railway and its Promoters:" Professor Denney gave a course of twenty lectures before a class of Columbus teachers on "The Teaching of English in the Public Schools," and of four lectures before the Kindergarten Normal School of Columbus on "Interpretation of English Literature:" Professor Kellerman has been pursuing some special investigation in Sorghum Smut, and hopes to report favorable results soon: and Professor Edward Orton, Jr. has made some very valuable experiments with and for the National Association of Brick and Tile Manufacturers.

I beg leave to recommend that the special report made by Professor Gibbs on "Methods of Conducting Physical Examination of Soils", the briefer yet very valuable report of Professor Weber on "Sugar Beets in Ohio," and the statement of some of the results of the Gymnasium work by Miss Elliott, be incorporated in the report which you make to the Governor, and be printed. The report by Professor Gibbs should be illustrated with engravings from the photographs which he uses in his manuscript.

CONCLUSION

My thanks are again due the members of the Faculty and to yourselves, for the co-operation which has made the past year so successful. Nor do I forget the great mass of our students—loyal, industrious, earnest, faithful—whose constant desire to profit by the opportunities here offered has robbed administration of more than half its terrors.

Very respectfully,

JAMES H. CANFIELD.

Columbus, August 15, 1898.

TABLE I—THE WORK OF INSTRUCTORS, 1897-98

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
AGRICULTURE									
Breeds of Live Stock (8)†	3			2			24		
Principles of Breeding (9)		3			2			22	
Stock feeding and Hygiene (10)			3			2			27
Farm Equipment (11)	3			2			16		
Soils (12)		3			2			23	
Farm Crops (13)			3			2			24
Animal Mechanics and Exterior (14)	3			2			14		
Butter Making and Cheese Making (15)					8			14	
Rural Economics (16)			4						15
Dairy Farming (5)		2			2			26	
Butter Making and Cheese Making (6)					16			30	
Butter Making and Cheese Making (7, 15)		2						44	
Special					4	4		1	2
AGRICULTURAL CHEMISTRY									
Principles, Nomenclature, etc. (1)	3			6			64		
Organic Chemistry (8)		2			6			51	
Applications of Chemist'y to Agricult're (9)			2			13			46
Laboratory (4)		2		10	10	12	17	25	14
Chemistry of Milk and Milk-testing (7)		2						24	
Thesis and Similar Work				10	2	2	1	2	1
Laboratory (6)					10	12		2	1
ANATOMY AND PHYSIOLOGY									
Human Anatomy and Physiology (1, 51, 52)	6	6	6	8	5	3	69	71	67
General Physiology (2)			3			1			6
Histology and Hist-Chemistry (56, 4)	1	1		13	13	13	20	20	15
Physiological Laboratory (53, 54, 55)	2	1	1	23	10	15	24	32	10
Bacteriology (6, 7, 61)		2			2			67	
Microscopy (5)			1			6			30
Thesis and Similar Work						2			1
ASTRONOMY									
Astronomy and Geodosy (2)	4		4				9		13
General Astronomy (52)			5						17
Mathematical Astronomy (54)			2			12			3
BOTANY									
Physiological Botany (6)	3			8			55		
Medical Botany (4)		2			8			20	
Medical Botany (56)		2			22			23	
Systematic and Physiologic l Botany (55)	2	2		8	11		22	23	
Physiological Botany (53)	2			7			3		
Physiological and Economic Botany (7)		3			8			23	

†The figures in brackets are the department numbers—for which see Part II of this Report.

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
BOTANY—Concluded									
Laboratory Work (57, 58)				3	6	10	3	3	10
Elementary Botany (1)			3			43			41
Economic Botany and Veg Pathology (8)			3						19
Special and Advanced Work (59, 61, 62)			2	19	3	5	3	1	4
Thesis and Similar Work				1	1	1	2	2	2
CLAY WORKING AND CERAMICS									
Lectures (4)	5			6			5		
Analysis of Clays and Minerals (2)		1			9			7	
Lectures (6)			5						4
Quantitative Analysis of Simple Min'ls (18)	2			22		10	8		1
Analysis of Glasses and Glazes (7)					10			3	
Manufacture of Bricks (5)		5			6			4	
"Rational" Analysis of Clays & Pottery (3)						10			7
Thesis and Similar Work				20	25	25	1	1	1
CHEMISTRY									
Elementary (51, 52)	2	3		4	5		42	38	
Elementary (7)	4	6		38	44		120	110	
Qualitative Analysis (12)			2			25			32
Qualitative Analysis (53, 54)	1	1		11	11		11	3	
Quantitative Analysis (4)	1	1	1	8	9	10	36	28	23
Organic (8, 9)	5	1	1		4	6	7	6	8
Advanced Chemistry				6		2	6		4
Applied Chemistry		3						5	
Toxicology (11)			4						9
Thesis and Similar Work					4	2		8	5
CIVIL ENGINEERING									
Land Surveying (1)	10	1		20			26	5	
Topography (4)					12			15	
Railroad Surveying (2)			5			4			13
Topographical Surveying (3)	1			6			10		
Working Drawings in Ry. Constr't'n (5)					5			14	
Stereotomy (6)		3			4			10	
Bridge Strains (7)			5						9
Bridge Designing (8)				10			9		
Civil Engineering Laboratory (14)					8			9	
Sanitary Engineering (10)			5						8
Masonry Construction (15)	5						10		
Highways (16)		5						10	
Water Supply (18)		5						9	
Trusses (19)			5						10
Roof Trusses (20)				10			2		
Surveying (21)			2			4			14
Thesis and Similar Work					8			8	6

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
DOMESTIC SCIENCE									
Domestic Economy (1, 2, 3)	1	1	1	6	6	6	5	8	8
DRAWING									
Freehand Drawing (1)				20	12	12	129	87	35
Lettering (2)						18			94
Mechanical Drawing (3)	1	2	1	8	8	4	58	62	44
Draughting and Blue Printing (4)					6			8	
Photography (7)	1		1	4		8	14		32
Mechanical Drawing (8)	1	1		4	2		6	3	
Mechanical Drawing (10)	1			4			30		
Mechanical Drawing (11)		1			8			3	
Clay Modeling (12)						4			3
Technical and Decorative Design (13)				4	4		11	4	
Pen Drawing (14)				4			6		
Technical Drawing (5)	1			6			28		
Orders of Architecture (1)		1			8			4	
Styles of Architecture (2)			1			8			2
Decoration and Ornament (5)		1			4			2	
ELECTRICAL ENGINEERING									
Electrical Engineering (2)	5	5	5				14	12	12
Electrical Designing (3)				1	6	15	13	13	12
Electrical Laboratory (4)				18	18	18	17	14	12
Electrical Engineering (5)	2	2		4	8		24	20	
Special						6			2
***ELOCUTION AND ORATORY**									
The Science of Expression (51) (52)	4	4		1	1		90	85	
The Art of Expression (53, 54)	2	2		1	2		15	12	
Shakespeare and the Drama (55) (56)	2	2		1	2		11	11	
***ENGLISH LITERATURE**									
An Introduction to Eng. Literature (51) (52)	8	8					54	47	
The English Bible (55) (56)	1	1					7	17	
Shakespeare (57)	3						13		
The Drama (58)		3						18	
The Novel (59)	3						16		
From Dryden to Johnson (61)	2						12		
Masterpieces (66)		3						6	
Thesis Work				1			1	2	
The Drama since the Restoration (60)		2						9	
American Literature (62)		3						20	

*Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
GEOLOGY									
Cosmical Geology (2) (51)	5	5		1	3		49	26	
Paleontology (53) (54)		2		6			7	5	
Petrography (56)					3			9	
Physical Geography (1)		5	8					7	41
Economic Geology (3)			5						20
GERMAN LANGUAGE AND LITERATURE									
Elementary German (1) (51) (52)	12	12					121	82	
Science Reading (2) (53) (54)	4	10					33	21	
German Literature (55) (56)	8	8					43	32	
The German Drama (57)	3						11		
The German Prose (58)		3						9	
Faust I—(59)	2						3		
Faust II—(60)		2						3	
Middle High German (61)	2						4		
Mediæval Epics (62)	2						3		
Thesis				2	2				
*GREEK LANGUAGE AND LITERATURE									
Elementary Greek	5	5					13	8	
Xenophon's Memorabilia (51)	4						39		
Herodotus (52)		4						33	
Lysias (53)	4						4		
Homer (54)		4						4	
Thucydides (55)	3						8		
Demosthenes (56)		3						7	
Homer (57)	3						18		
Attic Drama (58)		3						17	
Ancient Art (59) (1) (60)	2	2					20	15	
Graduate	1						1		
*HISTORY AND POLITICAL SCIENCE									
HISTORY									
General History of Europe to Close of Middle Ages (51)	6						69		
From Close of Middle Ages to French Revolution (52)		6						59	
Political & Constitutional History of England to the Accession of the Stuarts (53)	3						27		
From Accession of Stuarts to Present Time (54)		3						22	
Political and Constitutional History of United States (55) (5) (56)	4	4					65	44	
History of Europe from 1789 to 1815 (57)	3	..	..				7		

*Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week: Lectures: First Term	Hours per week: Lectures: Second Term	Hours per week: Lectures: Third Term	Hours per week: Laboratory: First Term	Hours per week: Laboratory: Second Term	Hours per week: Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*HISTORY AND POLITICAL SCIENCE—Concluded									
HISTORY—Concluded									
History of Europe since 1815 (58)		3						7	
Roman History and Institutions (59)	3						6		
Protestant Reformation (60)		3						5	
Pro-Seminary (61) (62)	2	2					9	9	
ECONOMICS									
Elements of Political Economy (51) (52)	8	8					68	79	
The History of Industrial Society (53)	3						13		
The History and Theory of Socialism (54)		3						8	
Practical Problems in Economics (55)	2						30		
Industrial and Social Reforms (56)		2						27	
Transportation Problem (57)	2						10		
Money and Banking (58)		2						16	
POLITICAL SCIENCE									
International Law (51)	2						8		
Municipal Government (52)		2						11	
Political Institutions of the United States (53)	3						16		
Comparative Political Institutions of Europe and America (54)		3						17	
Thesis Work				3¾	3¾		15	11	
HORTICULTURE									
Elements of Horticulture (1)	3		2	2		4	12		10
Pomology and Viticulture (5)	2			3			6		
Vegetable Gardening and Seed Growing (6)		3			2			8	
Small Fruit Culture (7)			2			4			4
Elements of Floriculture (8)	2			1			5		
Commercial Floriculture (9)		2			1			5	
Home Flower Gardening (10)			1			2			5
Arboriculture (11)	1			3			7		
Forestry (12)		2			1			5	
Landscape Gardening (13)			1			2			6
Thesis and Similar Work				4		2	1		2
INDUSTRIAL ARTS AND SHOPWORK									
INDUSTRIAL ARTS									
Designing (2)				6	6	3	4	4	5
Shop Equipment (3)	3	3				2	1	1	1
Advanced Designing (4)						2			1
Workshop Appliances (5)				3					5
SHOPWORK									
Carpentry and Pattern Making (1)				12	12	16	38	42	29
Forging (2)				15	12	15	26	32	19
Foundry Work (3)				7	7	8	13	17	18
Chipping and Filing (4)				6	6	6	17	24	11
Machine Work (5) (6)				14	20	15	15	43	25
Thesis and Similar Work				6		3	2		2

*Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*LATIN									
Cicero (51)	8						65		
Livy, Horace (52)		8						54	
Horace (53)	8						36		
Tacitus (54)		8						31	
Lucretius (57)	3						4		
Elegiac Poets (58)		3						4	
Pharmaceutical (1) (59) (60)	5	5	5				22	20	19
Teachers' Course (6) (62)	2	2					7	5	
Thesis and Similar Work									4
MATHEMATICS									
Elementary Algebra (1)	5						20		
Elementary Algebra (2)	5	5	5				9	10	9
Plane Geometry (3)	5	5					14	25	
Solid Geometry (13)		10						24	
Plane Trigonometry (14)	20		10				102		29
Analytical & Spherical Trigonometry (15)		10						106	
College Algebra (16)		15						106	
Plane Analytics (17)			25						85
Space Analytics (18)	20						69		
Differential Calculus (19)		20						59	
Integral Calculus (20)			20						53
Differential Equations (11)	1						22		
Least Squares (8)	2						11		
*MATHEMATICS									
Plane Trigonometry and Plane Analytics (51) (53)	18						100		
Problems on all Past Work (65) (66)	1	1					12	13	
Advanced Mathematics (63) (64)	9	7					11	10	
Elementary Calculus and Theory of Equations (52) (54)		18						95	
MECHANICAL ENGINEERING									
Mechanism (3)		5				4		23	5
Analytical Mechanics (6)	10	10					42	37	
Strength of Materials (7)			10						35
Thermodynamics (8)	5		5				27		27
Prime Movers (9)	5						22		
Machinery and Millwork (10)		5						19	
Experimental Laboratory (12, 12, 14, 15, 16, 17)		1	1	12	13	15	13	16	17
Machine Design (18)	5	5					9	7	

*Semester work—generally

TABLE 1—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
MECHANICAL ENGINEERING—Concluded									
Materials of Construction (23)	5						8		
Hydraulic Machinery (20)			2						5
Timber and Masonry (22)		5						7	
Machine Design (19)	3					10	14		25
Experimental Eng'ring Laboratory (24)						4			1
Experimental Eng'ring Laboratory (25)						6			8
Thesis Work and Graduate Work	3	4	2	34	12	30	10	10	9
Care of Boiler and Engine		2						36	
METALLURGY AND MINERALOGY									
Metallurgy (4)	5	5					16	13	
Metallurgical Laboratory (5)				21	10	20	15	15	16
Ore Dressing (8)	2						4		
Assaying (6)		1			20			13	
Mineral Chemistry (9)			5						2
Mineralogy (2)			6						47
Determinative Mineralogy (3)						10			4
Thesis and Similar Work						2			3
Metallurgical Construction (7)		1			3			2	
MILITARY SCIENCE AND TACTICS									
Military Drill				5	3	3	340	330	264
Tactics		2						35	
Art of War		2						17	
MINE ENGINEERING									
Mine Surveying (1)	3			6			2		
Ventilation and Haulage (2)		5			6			3	
Mine Engineering (5)	5	5	5	2	2	1	2	2	2
Mine Operating (3)			5			2			3
Mine Surveying (4)	3			6			4		
Special Surveying			3			5			3
Thesis and Similar Work						4			2
*PEDAGOGY									
Elementary Educational Psychology (51)	4						5		
The Science and Art of Teaching (52)		4						8	
History of Education (53)	4						10		
The Herbartian Pedagogy (55)	4						10		
The History of Education, U. S. (57)	2						6		
Philosophy of Education (58)		4							
The Herbartian Pedagogy (60)		2						3	
Laurie's Institutes of Education (62)		2						2	
Herbart's Science of Education (64)		2						9	
Special	2	2					9	1	

*Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
PHARMACY									
Pharmacy (6) (7)	3	2			10		29	28	
Dispensatories (8)			2			10			25
Pharmaceutical Chemistry (9)	2			10		10	20		
Extemporaneous Chemistry (10)		2	3		10			19	10
Lectures and Dispensing Practice (11)			2			20			18
Materia Medica (12) (13)	5	3		10			17	17	
Materia Medica and Therapeutics (14)			2						14
Pharmaceutical Assaying (15)	2	2		10	12		1	4	
General Pharmacy (17)			2			10			1
Laboratory					10			1	
Pharmacy (13) (Vet. Students)	5						5		
*PHILOSOPHY									
Psychology (51)	4						21		
Psychology (53)	6						50		
Logic and Ethics (52)		4						24	
Logic (54)		6						52	
History of Modern Philosophy (56)		6			3			35	
Hist. of Ancient and Medieval Phil. (57)	6						34		
Advanced Work (59) (60)	2	2					14	10	
Physiological & Exper. Psychology (61) (62)		2		4	4		3	3	
Leading Works in Philosophy (63) (64)	1	2					1	1	
Special	2	3			1		2	3	
PHYSICAL EDUCATION									
Young men		42						275	
Young women		14						100	
PHYSICS									
Elementary Physics (1)	10	10					97	83	
Mechanics and Heat (2) (51) (52)	6	7	5				103	75	66
Problems (3)	2	2	2				32	22	17
Electricity and Magnetism (4)	3						21		
Physical Laboratory				45	36	33	34	41	40
Mechanics, Sound and Heat (53)	3						46		
Electricity and Magnetism (54)		3						14	
Thesis and Similar Work			7						2
*RHETORIC AND ENGLISH LANGUAGE									
Paragraph Writing (51) (1)	12						259		
Practical Rhetoric (1) (52)		12						218	
Analysis of Prose (53) (54)	8	8					46	58	
Advanced Rhetoric (3)	4	4					53	41	
Advanced Composition (4)	4						69		
Rapid Writing (55) (56)	1	1		3	2		20	17	

* Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Continued

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
RHETORIC & ENGLISH LANGUAGE—Concl.									
Brief Making and Argument (57)	3						12		
Short Stories (60)		2						17	
Poetics (59)	2						11		
Studies in Exposition (58)		3						11	
Rhetorical Theory and Criticism (61) (62)	2	2					6	6	
Thesis and Similar Work					2			11	
ENGLISH LANGUAGE									
Old English (51) (52)	2	2					23	24	
Middle English (53)	2						5		
Historical English Grammar (54)		2						8	
*ROMANCE LANGUAGES									
FRENCH									
Elementary French (1) (52)	16						13		
Modern Prose and Plays (1) (52)		6						90	
Science Reading (3) (53) (54)	2	2					2	17	
Modern French Literature (55) (56)	5	5					5	47	
Recent French Prose Writers (58)		3						8	
Advanced Prose Composition (59)	3						3		
French Literature before 17th Century (63)	3						8		
The Development of the French Novel (64)		3						0	
Thesis and Similar Work				5	7				
SPANISH									
Grammar and Readings (51) (52)	2	2					20	6	
VETERINARY MEDICINE									
Anatomy (28)	5			5			2		
General Pathology (29)		5						10	
Special Pathology (30)			5						7
General Surgery (24)	5			5			12		
Clinic (19)				18	24	24	5	15	11
Special Pathology (20) (21)	3	5	3				9	9	9
General Therapeutics (22)			5						9
Lectures and General Pathology (14)	5						5		
Osteology (11)	5			5			12		
Meat Inspection (27)	3						4		
Special Pathology (15) (16)		5	5					5	5
Diseases of the Cow (17)		3						23	
Surgical Diseases and Operations (18)	5	5	5		0	10	10	6	3
Lectures (13)		5	5			5		4	13
Myology (12)		5			5			17	
Eye Diseases			2						9
Anatomical Laboratory (25)		5			3			9	
Principles of Horse-shoeing (26)			3						10

*Semester work

TABLE I—THE WORK OF INSTRUCTORS, 1897-98—Concluded

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
ZOOLOGY									
Comparative Zoology (1) (51) (52)	4	4		16	17		70	59	
Com. Anatomy of Vertebrates (53) (55)	1			15			12		
Com. Anatomy of Vertebrates (54) (56)		1			10			11	
Entomology (61) (62)				10	10		4	3	
Zoology and Anatomy (58) (60)					18			13	
Economic Entomology (3)						10			1
Economic Entomology (4)	2	2	1			2	5	5	5
Systematic and Practical Entomology (7)			3						3
Comparative Zoology (64)		2			6			24	
Zoology (65)				18			11		

TABLE II—SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY

	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.
Bachelor of arts	1	1	6	2	2	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18
Bachelor of philosophy	...	...	...	2	...	2	2	1	1	2	6	7	4	8	8	5	5	19	26	27	27
Bachelor of science	5	5	1	2	5	3	2	4	2	4	4	8	2	10	7	11	7	9	4	10	10
Bachelor of science in agr.	...	...	...	...	...	...	...	1	1	...	...	...	2	3	3	...	...	2	4	4	5
Bachelor of science in H., F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	1	1	1	2
Bachelor of science. Ind. Arts	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			1	1
Civil engineer	...	...	...	...	...	1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8
Mechanical engineer	...	...	1	...	2	4	1	3	1	2	4	2	3	2	5	2	1	2	4	9	5
Electrical engineer	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	9	8	15	17	13	10
Engineer of mines	...	...	1	1	...	...	1	2	4	1	4	2	...	...	1	1	4	1	6	3	2
Graduate in pharmacy	...	...	...	...	...	...	...	...	...	3	...	2	3	6	5	5	3	11	12	11	7
Master of pharmacy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1		1
Doctor of veterinary med.	...	...	...	...	...	...	...	...	...	1	...	1	4	...	4	5	...	4	2	3	
Master of arts	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2	...	...	2		4	4
Master of science	...	...	...	1	...	...	...	...	...	...	...	1	1	2	2	...	2		3	3	2
Master of agriculture	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2		1
Master of science in H. & F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			1	1
Doctor of philosophy	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1				
Doctor of science	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1		1	
Bachelor of laws	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	18	15	16	6	23	22
Master of laws	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	2		6		
Totals	6	7	9	8	9	11	12	16	18	24	28	26	30	36	65	79	70	112	118	135	126

TABLE III—SHOWING THE NUMBER OF STUDENTS IN THE GENERAL, TECHNICAL AND PROFESSIONAL COURSES

	1890-91.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.
General courses (College of Arts).....	137	151	194	245	256	322	337	358
Technical courses (other Colleges except Law).....	166	259	381	368	424	453	453	511
Professional courses (College of Law).....		55	67	72	65	100	132	148
*Graduate students and summer school....	2			1		94	97	133
Totals	305	465	642	686	745	969	1,019	1,150

*Until 1896, graduate students have been included in the first three classes.

OHIO STATE UNIVERSITY.

COLUMBUS, O., August 10, 1898.

DR. JAMES H. CANFIELD, President, Ohio State University:

MY DEAR SIR: I have the honor to transmit a report showing the laboratory work done by this Department in Agriculture 12, (Soils) which has been prepared by Associate Professor W. D. Gibbs.

A number of the experiments here outlined are based upon Wahnschaffee's Scientific Examination of Soils. A large number of the pieces, however, therein photographed and described have been designed by Professor Gibbs. I believe the publication of this report would add materially to the cause of agricultural instruction in this country.

Very respectfully submitted,

THOMAS F. HUNT.

PHYSICAL EXAMINATION OF SOILS.

WILLIAM DAVID GIBBS.

Our present courses in agriculture provide for the study of soils five hours per week during the winter term. Three hours per week are devoted to class room lectures or recitations while two hours per week, from two o'clock until four on Fridays, are given to laboratory work on the study of the physical properties of soils. Experiments are arranged with reference to the number of students in the class and the number of laboratory periods in the term. There have been, on the average, about twenty students in the class and ten to twelve periods of laboratory work. By providing ten to twelve experiments and allowing students to work in pairs the entire class may be accommodated at each laboratory period during the term.

The experiments are designed with reference to their scientific and practical value. Many laboratory experiments with soils are unsatisfactory because actual field conditions cannot be obtained, and in this particular are misleading. However, many general principles may be demonstrated and fixed in the student's mind that would never be gained from recitations or lectures.

The soils used in experiments are typical agricultural soils selected with reference to their differences in texture and crop producing powers. The following soils were used by the class during the winter term of 1898:

No. 1. Muck soil. Selected from a very fertile corn field on the Ohio State University Farm.

No. 2. First bottom alluvial loam. Very fertile. Ohio State University Farm.

No. 3. Second bottom sandy loam with considerable clay. Ohio State University Farm.

No. 4. Fine sand (.25 mm. to .1 mm. diameter) Ohio State University Farm.

No. 5. Coarse sand (.5 mm. to .25 mm. in diameter) Ohio State University Farm.

All the soils were air dried. The first three were sifted with a two millimeter sieve which allowed only the fine earth to pass through. All of the soils were placed in bins in the laboratory.

The following is a list of the laboratory experiments with descriptions and illustrations of each:

EXPERIMENT NO. 1.

DETERMINATION OF SPECIFIC GRAVITY.

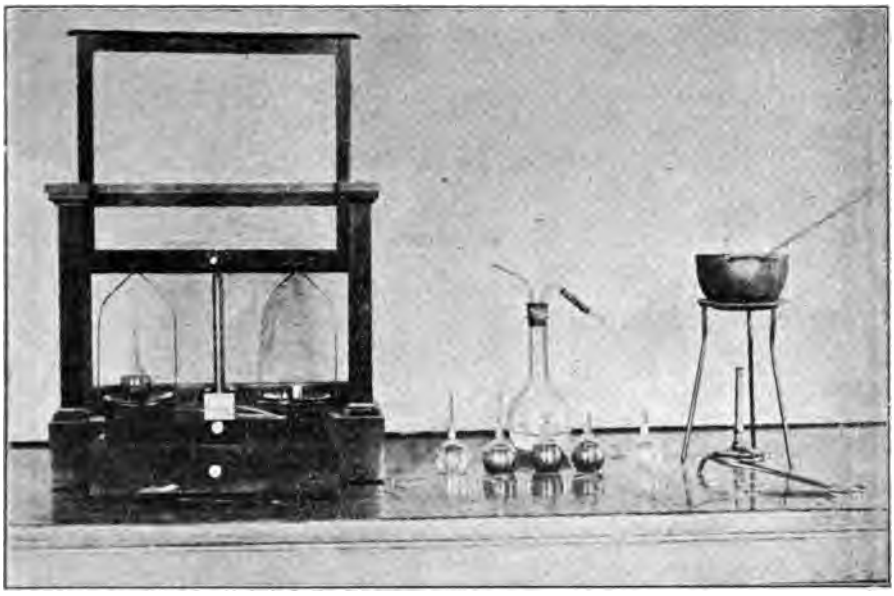
With a flask of 50 cc. capacity and provided with a ground glass stopper, drawn out to an open capillary tube determine specific gravity of four soils which will be provided. Nos. 1, 2, 3 and 4.

Note weight of flask filled with water, pour out about one-half of the water in the flask and put in a weighed quantity (10 grammes) of the soil dried at 110°C; then boil in a water bath about one minute and entirely fill the flask with water. Weigh.

Calculation: Add weight of soil used to weight of flask filled with water and deduct therefrom weight of flask filled with water and soil. The difference expresses the weight of a volume of water equal to the quantity of soil used.

The specific gravity is found by dividing the weight of the soil by the weight of the water it has displaced.

This experiment shows weights of the various soils as compared with the weight of equal volumes of water. The specific gravity of most soils is about 2.5; that is, soil calculated free of air space weighs about 2.5 times as much as an equal volume of water. The more organic matter a soil contains the less its specific gravity. In general the specific gravity of a soil decreases inversely as its content of organic matter. Specific gravity must not be confused with apparent specific gravity which will be explained in the following experiment:



Determination of Specific Gravity.

EXPERIMENT NO. 2.

DETERMINATION OF THE VOLUME WEIGHT, APPARENT SPECIFIC GRAVITY, AND POROSITY OF SOILS.

Determine the volume weight of four soils which will be provided. Numbers 1, 2, 3, and 4. Weigh the empty tubes carefully. Use the soil direct from the bins and pour into the tube the measure level full. Then place the tube in the compacting machine and allow the weight to fall six times from the twelve-inch mark. Pour in another measure of soil and repeat. Continue this until the tube is filled to the mark near the top. Weigh. Determine at the same time with a special sample the hygroscopic water which escapes at 110°C. Also calculate the number of cubic inches, or centimeters, occupied by the soil in each tube.

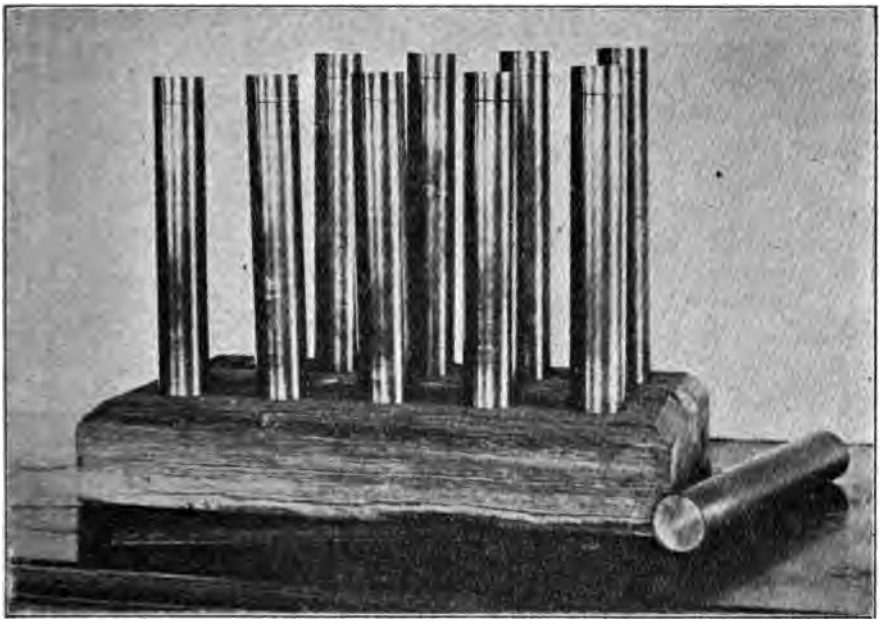
Calculations: Subtract the weight of the empty tube plus the weight of hygroscopic water in the soil used from the weight of the filled tube. This will be the weight of the given volume of soil. The volume weight of a cubic centimeter of soil should then be calculated.

By dividing the volume weight of the soil with the weight of the same volume of water the apparent specific gravity of the soil is obtained.

By dividing this apparent specific gravity with the real specific gravity of the soil obtained in Experiment No. 1, and subtracting from 100, the remainder expresses the per cent. of porosity of the soil, *i. e.*, the space which, in the dry soil, is occupied by air.

The volume weight of a soil varies with the amount of packing. A freshly plowed soil is much lighter per cubic foot than the same soil packed by rains or by tramping. In other words, soil has an apparent and a real specific gravity. Average field soils in good tilth have an apparent specific gravity of about 1.2, and when entirely free from air a real specific gravity of about 2.5.

The compacting machine referred to above was designed to pack all the soils into the tubes uniformly and thus eliminate, in a large degree, the error due to unequal packing in different tubes when making comparisons of apparent specific gravity of different soils. The machine does not do the work with absolute exactness, but seems to be a decided improvement over the uncertain method of filling by hand, which at best, gives very unsatisfactory results. (See accompanying photograph.)



Determination of Volume Weight, Apparent Specific Gravity, and Porosity of Soils.

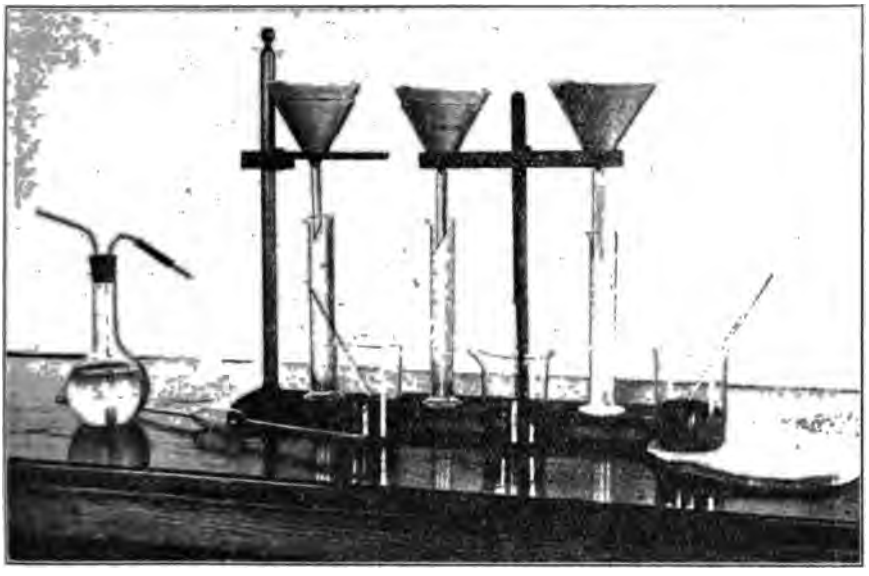
EXPERIMENT NO. 3.

THE POWER OF LOOSE SOILS TO RETAIN MOISTURE.

Use four samples of soil which will be provided. Numbers 1, 2, 3 and 4.

Pour over 100 grammes of the air dry fine soil (in a No. 4 or No. 5 beaker) one hundred cubic centimeters of distilled water, and effect the thorough disintegration and saturation of the soil by stirring with a glass rod. Now rinse the soil with a known quantity of water, admitted from a pipette, upon a filter saturated with water. The water running off is caught in a graduated cylinder of two hundred cubic centimeters capacity, and when no more drips off the quantity is read in cubic centimeters. The difference between the quantity of water used and that caught corresponds with the quantity of water retained by the soil.

Determine at the same time, with a special sample, the hygroscopic water which escapes at 110°C. Determine the per cent. of water obtained by weight. Add to the number of cubic centimeters of water retained the grammes of hygroscopic water and divide by the weight in grammes of the water free soil. The result will be the per cent. of water retained, calculated on the basis of water free soil. This experiment is valuable in illustrating the power of different types of soils to absorb and retain rainfall. One of the advantages of cultivating soil is to make it loose and open in structure, so that rain will be absorbed and retained more thoroughly than would be the case if the soil were uncultivated. Results from this experiment should be studied in connection with those obtained in Experiment No. 4.



The Power of Loose Soils to Retain Moisture.

EXPERIMENT No. 4.

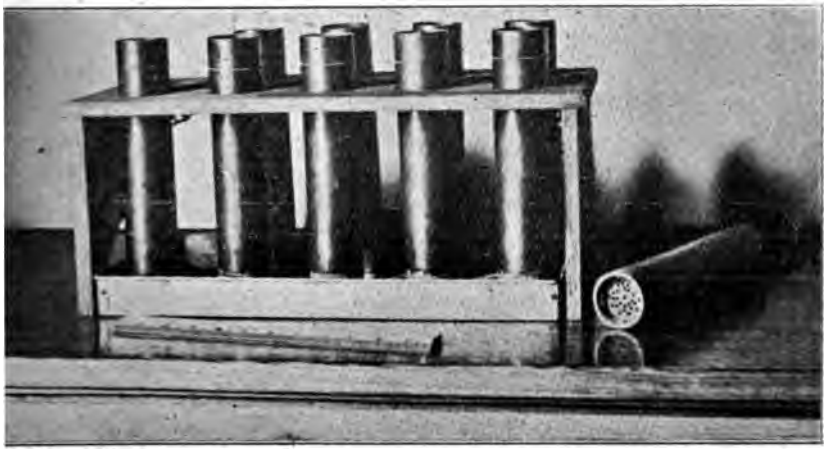
THE POWER OF COMPACT SOILS TO RETAIN MOISTURE.

Make determinations with four soils which will be provided. Numbers 1, 2, 3 and 4.

Place a moist linen rag in the bottom of a brass cylinder. Weigh and then fill, within one inch of the top in the following manner: Pour in one measure of soil. Place cylinder in compacting machine and drop weight six times from the twelve-inch mark. Pour in another measure and repeat. Continue this until cylinder is filled within one inch of the top. Weigh the cylinder again and then place in the pan containing water so that the perforated bottom dips about one-half inch in the water. Then cover with a dish. The cylinders are allowed to remain under the dish until after repeated weighings (for which purpose they are placed in a shallow pan) they show an approximately constant weight. The student will need to return to this experiment from day to day until this constant weight is obtained.

Determine at the time of beginning the experiment, with a special sample, the hygroscopic water which escapes at 110°C.

Calculation: Add to the weight of the water absorbed, the weight of the hygroscopic water, and divide by the weight of the water free soil. The result will be the per cent. of water retained, calculated on the basis of water free soil.



The Power of Compact Soils to Retain Moisture.

EXPERIMENT No. 5.

RATE OF PERCOLATION OF WATER THROUGH SOILS.

The series of tubes have been filled within one inch of the overflow pipes with soils 1, 2, 3, 4 and 5. The compacting machine was used.

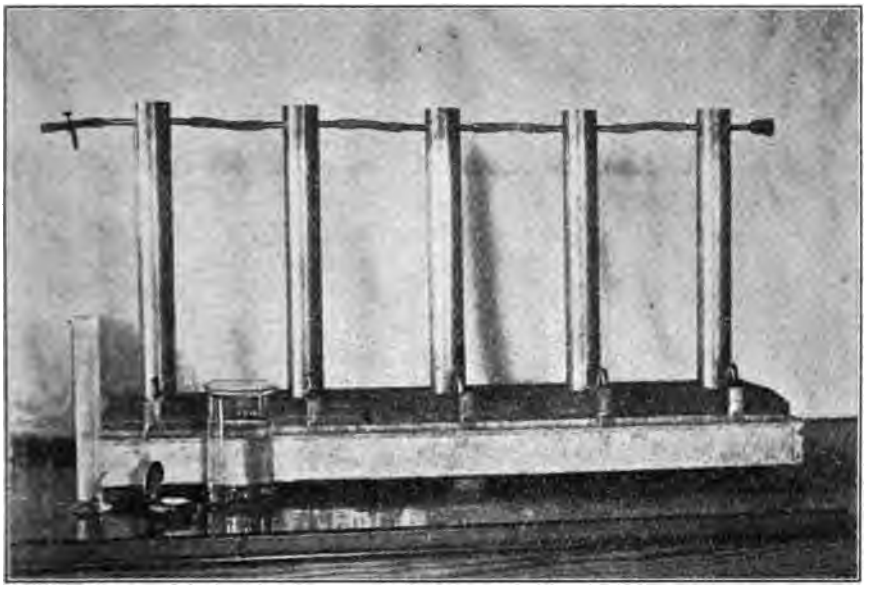
After each measure of soil was put in the weight was dropped three times from the eight-inch mark. The surface of the soil in each tube is covered with one inch of coarse gravel to prevent the soil being disturbed by flowing water.

See that all tubes are connected by rubber tubing and the extreme ends of small tubes corked.

Pour in distilled water gently and keep the cylinders almost level full. After the flow into the glass flasks has become uniform, note the number of cubic centimeters which flow through in half an hour. Determine this by measuring in a graduated cylinder.

The character of soils used may be examined in the boxes. The tube number corresponds with the soil number.

This experiment brings out the differences between soils in regard to the rate of percolation of water through them. Other things equal it is desirable that a soil should allow water to pass through slowly, holding moisture the greatest length of time within the reach of crop roots.



Rate of Percolation of Water Through Soils.

EXPERIMENT No. 6.

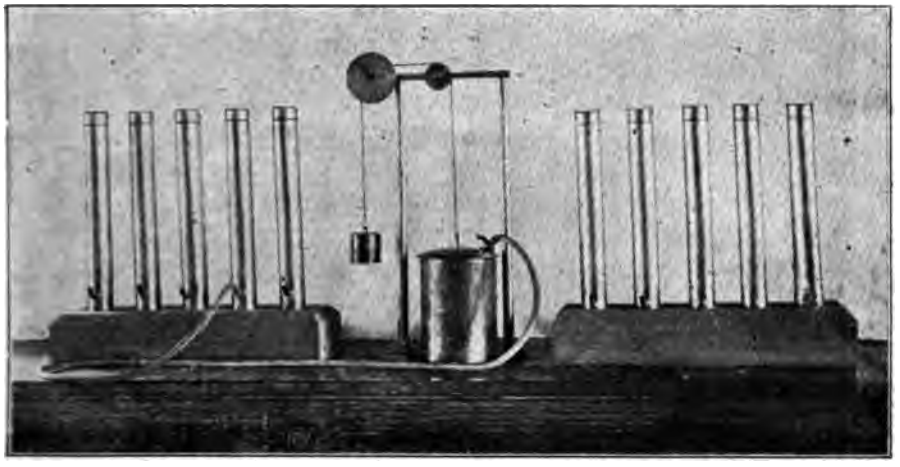
RATE OF PERCOLATION OF AIR THROUGH SOILS.

Soils 1, 2, 3, 4 and 5 are used in this experiment. The cylinder numbers correspond with soil numbers.

The compacting machine was used in filling the cylinders; after each measure the weight was dropped three times from the twelve-inch mark.

Open the cock on the copper cylinder and detach the hook holding the weights. Allow the copper cylinder to sink *by its own weight.* Attach the rubber tube to soil tube No. 1; attach the weight hook and note the number of degrees passed by the pointer in ten minutes. Record the rate for each of the five soils.

This experiment has a direct practical bearing on the question of soil ventilation. Soil air is essential to the life of nitrifying and other bacteria which develop fertility. Other things equal the more readily soil will allow air to circulate through it the more favorable conditions will be for the formation of plant food.



Rate of Percolation of Air Through Soils.

EXPERIMENT No. 7.

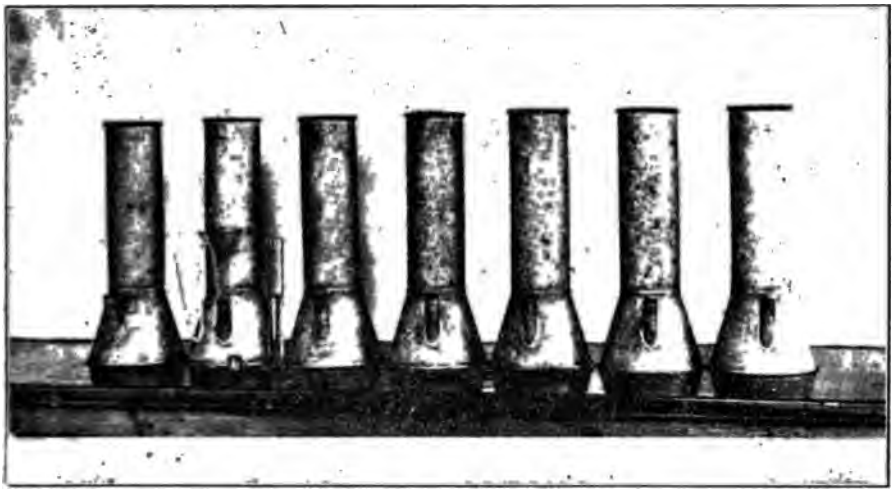
EFFECT OF MULCHES ON EVAPORATION OF WATER FROM SOILS.

The cylinders are eighteen inches deep by four inches in diameter and are filled with first bottom soil from the Ohio State University Farm.

No. 1. Not mulched.
No. 2. Not mulched.
No. 3. Surface cultivated two inches deep. (Soil mulch.)
No. 4. Surface cultivated two inches deep. (Soil mulch.)
No. 5. Mulched with two inches of coarse gravel.
No. 6. Mulched with two inches of fine sand.
No. 7. Mulched with two inches of sawdust.
No. 8. Mulched with two inches of cut straw.
No. 10. Not mulched. (Placed in draft.)
No. 11. Not mulched. (Placed in draft.)

Fill the cylinders to the same level with distilled water every twenty-four hours for one week and keep a careful record of the amount of water used each day. The "S" glass tube will be used to determine the exact level to which the tubes should be filled.

The cylinder which evaporates the least water during the period of observation should be the one having the most effective mulch.



Effect of Mulches on Evaporation of Water from Soils.

EXPERIMENT No. 8.

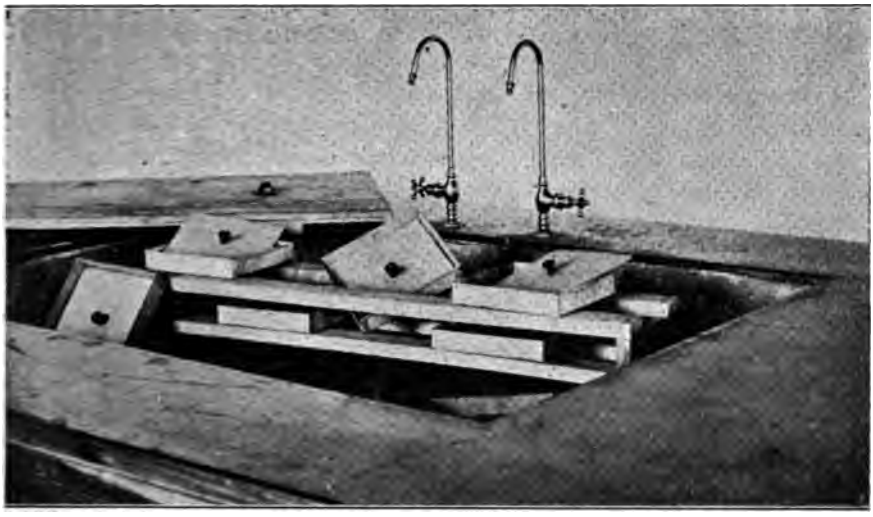
BEHAVIOR OF THE SOIL TOWARDS GASES.

Determine with four soils which will be provided. Numbers 1, 2, 3 and 4.

Place four hundred grammes of soil from the bin in shallow zinc tray, spreading it out as uniformly as possible. After weighing the tray (lid on) with the soil, place an empty weighed box together with the others (lids off) upon a shelf in the pneumatic trough. Place a thermometer in the trough, and at each weighing read the temperature. Weigh each box every twenty-four hours and deduct the increase in weight of the empty box from the increase in weight of the other boxes. Repeat the weighings every twenty-four hours until with the same conditions of temperature an approximately constant weight is obtained. The moisture retained is calculated for 100 grammes of the soil dried at 110° C, and may be called the absorbent capacity for aqueous vapor. Add to the increase weight the weight of hygroscopic water and divide by the water free soil.

Determine moisture of each soil with a special sample at the time of starting the experiment.

This experiment brings out the fact that dry soils absorb only a very small amount of moisture from the air, even when the air is saturated, thus correcting an opinion which is prevalent but erroneous.



Behavior of the Soil Towards Gases.

EXPERIMENT No. 9.

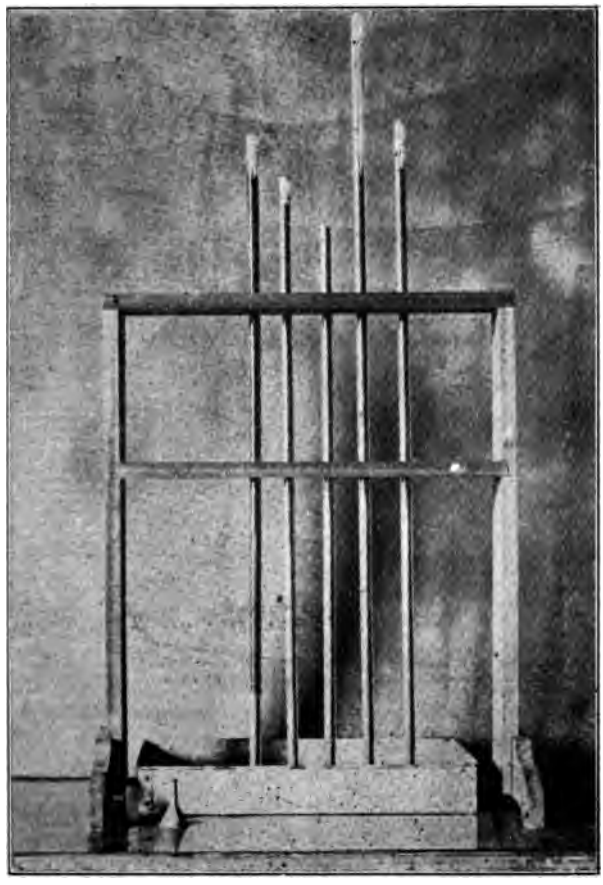
CAPILLARY ATTRACTION OF THE SOIL.

Determine with four soils which will be provided. Numbers 1, 2, 3 and 4.

The lower ends of the glass tubes are closed with fine muslin by drawing a rubber ring over them. Fill the tubes, tapping them gently, with air-dry fine soil, and insert them one or two centimeters deep in an iron tray containing water. The tubes should be held by supports which keep them suspended in the water.

Determine the height to which the water has risen each twenty-four hours for seven days, and record daily height for each and also total height in seven days.

The experiment is not entirely satisfactory from the fact that it is difficult to fill the tubes uniformly, and difficult to read accurately the height of the capillary water. But the results are sufficiently accurate to demonstrate the principle that soils of fine texture have greater capillary power than those of coarse texture.



Capillary Attraction of the Soil.

EXPERIMENTS Nos. 10 AND 11.

MECHANICAL ANALYSIS OF SOILS.

A modification of the method used in the Laboratory of the Division of Soils, United States Department of Agriculture.

Twenty grammes of "fine earth" are weighed out and placed in a porcelain mortar. Enough water is added to give the soil the consistency of paste. The mixture is then rubbed with a rubber tipped pestle.

In rubbing, there should be just enough pressure to detach adhering particles and not enough to break the grains. After five minutes rubbing, more water may be added and after letting it stand for two or three minutes, the turbid liquid is decanted into a beaker, "A." Repeat this pestling and decanting until an examination through the microscope shows the grains to be perfectly clean. When clean, the grains show sharp outlines and are transparent, while any adhering finer particles make them round and deeply colored. This pestling may require fifteen minutes to an hour or more.

When the material is thoroughly disintegrated, it is transferred from the mortar to a No. 2 or No. 3 beaker which is then filled with water, stirred and allowed to stand a few minutes, after which it is carefully decanted, leaving the last twenty or thirty cc, the liquid being added to the beaker "A." This is repeated until the sand is free from clay, fine silt, and much of the silt. The sand should be tested with the microscope. All particles smaller than .05 millimeters are silt or fine silt and should be removed by further decantation. The sediment in the bottom of beaker "A" should also be tested. If it contains particles larger than .05 millimeters, the washing or decantation was too rapid. In this case a recovery must be made.

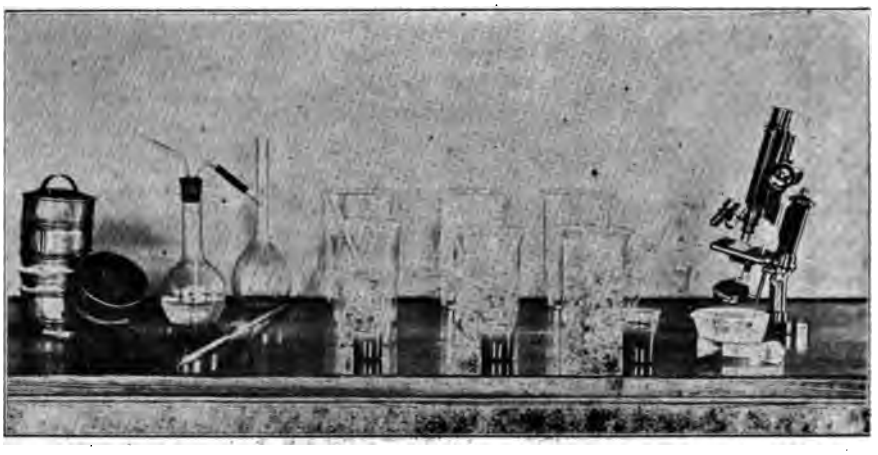
The sand is transferred from the beaker to a porcelain dish and dried. It is then ignited to destroy organic matter, after which it is sifted through a nest of sieves of 1, .5, .25, and .1 millimeter respectively, that going through the finer sieve being known as very fine sand. These five separations are *each separately* weighed.

The amount of silt, fine silt, and clay which was washed away from the sand may be obtained approximately by subtracting the total weight of sand, moisture and organic matter from the earth taken (20 grammes).

Considerable time and skill is required to make the separation of silt, fine silt, and clay. It will not be attempted in this experiment.

The following are the sizes into which the soil particles are separated:

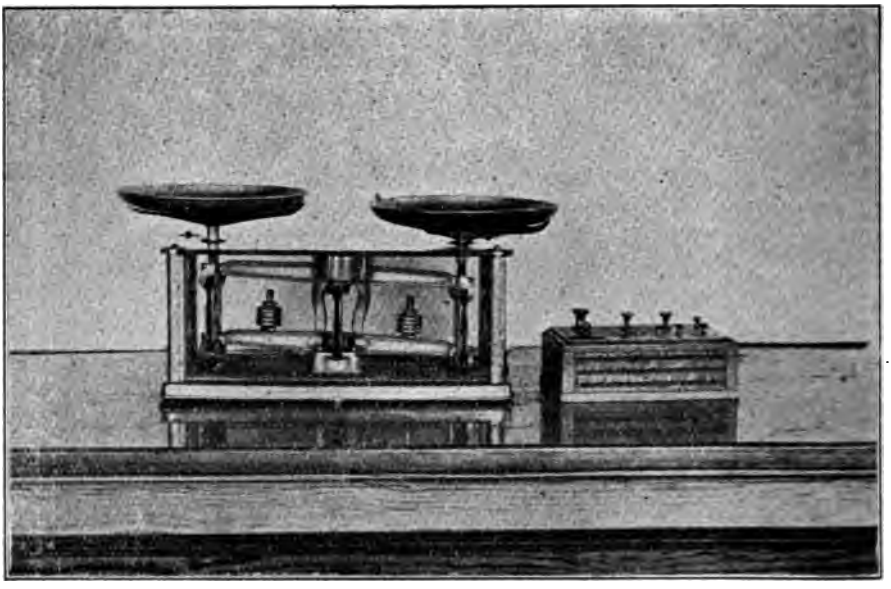
No. 1—Gravel 2—1 mm.
No. 2—Coarse sand 1— .5 mm.
No. 3—Medium sand .5 - .25 mm.
No. 4—Fine sand .25— .1 mm.
No. 5—Very fine sand .1— .05 mm.
No. 6—Silt .05— .01 mm.
No. 7—Fine silt .01— .005 mm.
No. 8—Clay .005— .0001 mm.



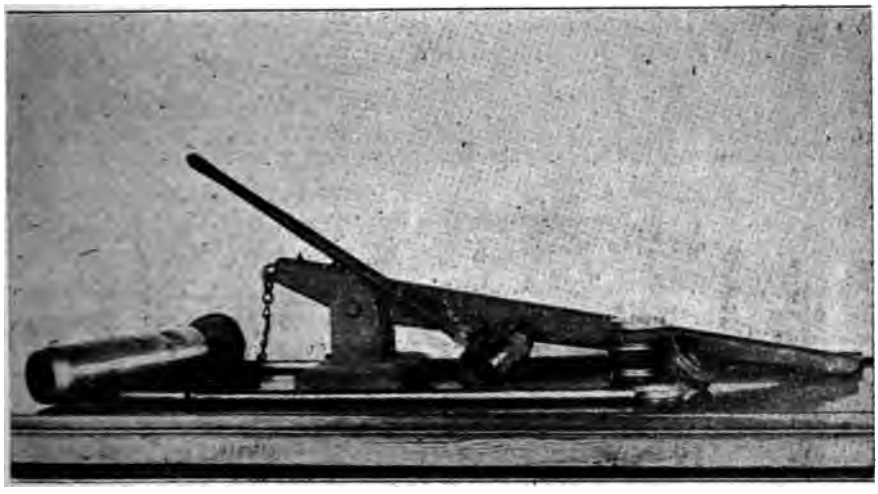
Mechanical Analysis of Soils.



Soil Compacting Machine. (See Experiment II.)



Torsion Balance.



Apparatus for Taking Soil Samples.

Department of Agricultural Chemistry.

The following investigations were conducted in the Department of Agricultural Chemistry during the past year:

1. A series of analyses of sugar beets was undertaken in order to determine the best localities in the state of Ohio for raising beets adapted to the manufacture of sugar. The results of the investigation were published in the *Ohio Farmer* and other papers.

The samples of beets obtained represented a section through the central part of the state from the lake shore to the southern tier of counties. The results of the work pointed clearly to the fact, that the lake region is best adapted to the growing of sugar beets for the manufacture of sugar, the beets from this part of the state being without exception above the requirements as generally accepted for the successful manufacture of sugar both in content of sugar and in the coefficient of purity of the juice.

2. An experiment was successfully carried out in regard to the production of root tubercles in water culture. The results of this investigation were embodied in the thesis of Mr. J. C. Britton.

3. The testing of soils for determining the ingredients of plant food has been commenced on a sample of soil sent by Mr. F. F. Neil, Venice, Ohio. Mr. Neil is a grower of celery, and for this reason the test is being made with celery plants.

It is hoped that the department may in the near future be of service to farmers throughout the state, who are not in the position to make soil tests for themselves.

A few Results of Systematic Gymnasium Work.

After only four months of regular, systematic work in physical training among the young women of the Ohio State University, it is very interesting and enlightening to make a comparison of the young woman as she was on entering the gymnasium with her condition at the close of the year.

In January, when the Department of Physical Training was established, all students on entering were examined and some thirty bodily measurements were taken of each. In June these same measurements were taken again and it is from these that we are able to get a correct idea of each student's development.

Four months is a very short time within which to secure pronounced improvements. It is very gratifying, therefore, to those interested in the actual help given by physical training, to find that among the young women, more than three-fourths show an increase in most of the measurements; half show a very marked increase in practically all measurements while only a few show a marked falling off which, in nearly every case, is accompanied by a record of excessively heavy college work or a prolonged illness.

It may be interesting to follow out the measurements of a few young women, giving only the most important ones and cutting out those that are of interest only to Anthropologists and of value only in determining deformities.

It is very evident, since the heart and lungs are the organs which most strongly influence life, that the measurements of the thorax (increasing or decreasing) will indicate, other things being equal, a corresponding increase or decrease in ability to carry work. For an example, the greater the girth and depth of chest, the greater the expansion of the lungs and the greater the amount of fresh air that can be taken in. Following this still farther, the greater the amount of oxygen taken into the lungs, the greater the power to resist disease. It is the measurements of the chest girth, chest depth, waist and ninth rib girth, and capacity of lungs that indicate the power of survival.

The following show the measurements as taken in January and again in June with the increase in each case:

	Chest girth expanded inches.	9th rib girth expanded inches.	Waist girth inches.	Chest depth inches.	Capacity of lungs cubic inches.
A.					
January	34	26.4	26.5	7.3	128
June	35.3	27.2	28.1	7.7	150
Increase	1.3	.8	1.6	.4	22
B.					
January	32.7	26.6	25.1	6.9	140
June	33.7	27.	25.5	7.	162
Increase	1.	.4	.4	.1	22
C.					
January	30.2	24.	21.9	6.1	125
June	31.2	24.9	22.6	6.4	150
Increase	1.0	.9	.7	.3	25

Many cases do not improve in all measurements but develop in the parts most easily affected and most needing development; while other parts remain the same or are reduced from too large measurements to those more nearly normal.

	Chest girth expanded inches.	9th rib girth expanded inches.	Waist girth inches.	Chest depth inches.	Capacity of lungs cubic inches.
January	32.4	27	24.7	6.5	140
June	33.2	27	24.7	6.7	172
Increase	.8	0	0	.2	32

Averaging twenty-five of these typically good cases the average development in the four months proved to be

	Chest girth expanded inches.	9th rib girth expanded inches.	Waist inches.	Chest inches.	Capacity of lungs cubic inches.
Average increase	1	.7	.57	.15	16

For the sake of the "uninitiated" it will be well to say that an expansion in chest girth of half an inch in four months is considered an exceptionally good result. Of course there are a few cases that might be called almost abnormal, in which the change far exceeds this. One young woman of the University gained in chest girth quite three inches in four months—but this should not be taken as the rule or at all as a generally desirable result.

The results given in the tables above are extremely satisfactory.

Report of the Treasurer.

COLUMBUS, OHIO, June 30, 1898.

To the Honorable JOHN T. MACK, President Board of Trustees of the Ohio State University.

SIR: I beg to hand you herewith my annual report for the fiscal year ending the 30th day of June, 1898. This report is accompanied by proper vouchers for all disbursements.

Respectfully submitted,

F. W. PRENTISS, Treasurer.

STATEMENT I.

DETAILED STATEMENT OF RECEIPTS BY F. W. PRENTISS, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1898.

Date.	From whom received.	For what purpose.	Amount.	Total.
1897.				
June 30	To balance			$19,782 38
July 10	U. S. Treasury	Cong. app. year ending June 30, 1898		23,000 00
31	W. C. McCracken	Sale of old iron		10 00
Aug. 19	E.H.Gay & Co.,Boston	100 M. O. S. U. certificates @ $104.31 and interest		105,279 30
Sept. 21	Nat. Brick Mfrs. Assn.	Endowment scholarship	$250 00	
	J. W. Groves	Sale of old stoves	3 00	
	Geo. Kauffman	100 coup. c'rds for stud'nts	500 00	753 00
27	Geo. Kauffman	80 " "	400 00	
	Geo. Kauffman	8 and 9 insts. rent 96-7 pt. 97-8	135 00	535 00
Oct. 9	Comrs. Sinking Fund.	Int. on endowment		8,500 00
	Auditor of State	Req. No. 80 O. S. U. fund		12,661 01
	G. B. Kauffman	Sale of 60 coup. cards	300 00	
	Alexis Cope, Bursar	Students' fees	8,936 29	9,236 29
Nov. 4	Auditor of State	Req. No. 80 O. S. U. fund		12,808 51
	T. & O. C. Ry Co.	Error in freight, account of Biol. building	7 73	
	L. H. Goddard	2 pieces Bedford stone, Town's Hall	1 41	
	G. B. Kauffman	Supplies sold students	514 27	
	Emerson McMillin	Acc't Fellowship Astron.	150 00	
	G. W. Knight	2-3-4-5 insts. rent 1896-7	150 00	
	W. T. Magruder	Sand and stone, Twn. H'l	3 90	
	C. W. Mesloh	1 and 2 insts. rent 1897-8	36 00	863 31
15	Comrs. Sinking Fund	Int. on endowment		3,500 00
16	G. B. Kauffman	2 inst. rent 1897-8	45 00	
	E. A. Hitchcock	Stone, etc.	1 20	
	The Fish Stone Co.	Stone sold by Prof. Hunt	35 00	
	S. I. Isabel	Stone, etc.	6 12	87 32
	Auditor of State	Req. No. 82 O. S. U. fund	16,348 90	
	Auditor of State	" 83 "	8,025 00	24,373 90
30	B. F. Thomas	1-2-3 insts. rent 1897-8	127 50	
	Alexis Cope, Bursar	Students fees	679 29	806 79
	Auditor of State	Req. No. 85 O. S. U. fund		12,808 51
Dec. 7	Auditor of State	" 85 "	12,895 17	
	Auditor of State	" 86 "	16,181 45	29,076 62
20	Seasongood & Mayer	Proceeds 50 M. bonds sold December 17, 1897		52,341 25
30	Emp. Liab. Ins. Co.	Physician's fee, attending W. Blinco	5 00	
	G. B. Kauffman	3 and 4 insts. rent 1897-8	90 00	95 00
	Comrs. Sinking Fund	Int. on endowment		4,481 10
1898.				
Feb. 4	Alexis Cope, Bursar	Students fees		6,375 00
	G. W. Kauffman	40 coup. c'rds s'ld stud'nts	200 00	
	G. W. Kauffman	5 inst. rent 1897-8	45 00	
	G. W. Kauffman	20 coup. c'rds s'ld stud'nts	100 00	
	H. A. Weber	Tickets sold T. H. Ded.	17 00	

STATEMENT I—Continued.

Date.	From whom received.	For what purpose.	Amount.	Total.
1898.				
Feb. 4	G. W. Knight	6 and 7 inst. rent 96-7	$75 00	
	B. F. Thomas	4 and 5 inst. rent 97-8	85 00	
	Edw. Orton, Jr.	Cash rec'd Dept. Ceramics	9 72	$531 72
11	Comrs. Sinking Fund.	Int. on endowment	3,500 00	
	Alexis Cope, Bursar	Student fees	2,935 06	6,435 06
22	Auditor of State	Req. No. 1, O. S. U. fund.	3,380 40	
	Auditor of State	Req. No. 2, O. S. U. fund.	13,285 17	16,665 57
	Emerson McMillin	Last 2 qrs. end. E. McM. Fellowship	150 00	
March 10	G. B. Kauffman	20 coupon cards sold students	100 00	250 00
	Auditor of State	Req. No. 3, O. S. U. fund.	13,285 17	
	Auditor of State	Req. No. 4, O. S. U. fund.	3,283 83	16,569 00
	T. F. Hunt	Disc on pur. M. Lelley Co.	2 93	
	G. B. Kauffman	6th inst. rent 1897-8	45 00	
	G. W. Knight	8, 9, 10, inst. rent 96-7; 1st 1897-8	150 00	197 93
11	Comrs. Sinking Fund.	Int. on Endowment		3,000 00
April 5	G. B. Kauffman	20 coupon cards sold	100 00	
	Narragansett Mnf. Co.	Goods returned	11 50	
	C. W. Mesloh	3, 4, 5, inst. rent, 1897-8	54 00	
	B. F. Thomas	6 and 7 inst. rent 1897-8	85 00	250 50
	Alexis Cope, Bursar	Fees of students		5,115 65
11	Auditor of State	Req. No. 6, O. S. U. fund.	13,250 17	
	Auditor of State	Req. No. 7, O. S. U. fund.	6,879 24	20,129 41
	G. W. Knight	2nd inst. rent, 1897-8		37 50
May 3	Comrs. Sinking Fund	Int. on Endowment		4,500 00
	C. W. Burkett	For ribbed glass sold	1 25	
	W. T. Magruder	For old iron sold	60	
	G. B. Kauffman	40 coupon cards sold	200 00	
	G. B. Kauffman	7th inst. rent, 1897-8	45 00	
	Col. Supply Co.	Goods returned	1 98	
	G. B. Kauffman	Sale store room supplies.	100 00	
	G. W. Knight	3 and 4 insts. rent, 1897-8	75 00	
	Crosby St. Gauge Co.	Goods returned	18 00	441 83
9	Auditor of State	Req. No. 8, O. S. U. fund.	12,938 57	
	Auditor of State	Req. No. 9, O. S. U. fund.	9,150 00	22,088 51
27	Auditor of State	Req. No. 10, O. S. U. fund		12,990 01
31	C. W. Mesloh	6, 7, 8, inst. rent, 1897-8		54 00
	Briggs & Smith Co.	Proceeds 10 M. bonds sold May 25, 1898		10,645 50
June 16	Auditor of State	Req. No. 11, O. S. U. fund		5,452 56
	E. A. Eggers	Ground rent June 1-Dec. 11, 1897-June 1, 1898		112 50
	Alexis Cope, Bursar	Students fees		1,155 70
27	Comrs. Sinking Fund.	Int. on Endowment		5,492 01
	B. F. Thomas	8, 9, 10 inst. rent 1897-8	127 50	
	W. C. McCracken	Sale of old iron	1 65	
	F. C. Clark	Moneys rec'd from business men of college for Dept. Econ. and Sociology	850 00	
	Alexis Cope, Bursar	Students fees	12 01	991 16
28	W. H. Scott	Unclaimed order No. 56, yr. ending June 30, '97	1 25	

STATEMENT I—Concluded.

Date.	From whom received.	For what purpose.	Amount.	Total.
1898.				
June 28	Col. Construction Co..	Unclaimed order No. 1812 yr. ending June 30, '97..	47 67	
	Col. Construction Co..	Unclaimed order No. 3090 yr. ending June 30, '97..	1 26	
	Col. Construction Co..	Unclaimed order No. 3169 yr. ending June 30, '97.	727 50	
	Shilling Fdy. Co.....	Unclaimed order No. 3314 yr. ending June 30, '97..	1 50	
	Wm. Whitestine	Unclaimed order No. 3473 yr. ending June 30, '97..	45 00	
	Wash Townshend.....	Unclaimed order No. 3481 yr. ending June 30, '97..	30 00	854 12
	John Otts.....:...	Unclaimed order No. 177 yr. ending June 30, '98..	40	
	C. W. Fridley.....	Unclaimed order No. 3981 yr. ending June 30, '98..	1 00	
	J. F. Roberts.....	Unclaimed order No. 4018 yr. ending June 30, '98..	2 00	3 40
29	Alexis Cope, Bursar...	Students fees	7 50	
	Geo. B. Kauffman.....	8, 9, 10 insts. rent 1897–8..	135 00	
	Geo. B. Kauffman.....	Sales store room cards and cash	200 00	342 50
	Total receipts.....			$461,680 43
30	By balance.....			495 36
				$462,175 79

STATEMENT II.

DETAILED STATEMENT OF DISBURSEMENTS BY F. W. PRENTISS, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1898.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
July 1	Spahr & Glenn	Exam. questions printed	1	$4 25
	Westbote Co	" "	2	2 50
	F. A. Cole & Co	Coal	3	37 38
	L. H. Goddard	Photo. materials bought	4	5 25
	Nitschke Bros	250 programs	5	4 50
	Col. Rubber & Belt. Co.	Pipe, valves, etc	6	151 30
	Col. Sewer Pipe Co	Pipe	7	2 55
	F. S. Johnston	94 hours stenog. @ 12½ c	8	11 75
	Spahr & Glenn	Envelopes	9	75
	Ohio Agr. Exper. Sta	Chemicals, etc	10	36 38
	Thos. Boude	14 days @ $1.50	11	21 00
	A. Chantler	26 "	12	39 00
	Thos. Algeo	26 "	13	39 00
	Thos. Boude	14 "	14	21 00
	Jas. Stainbrook	11 "	15	16 50
	M. Peck	26 "	16	39 00
	J. L. D. Nichols	15 "	17	22 50
	Chas. Orendorf	12 "	18	18 00
	Henry Powers	5 "	19	7 50
	Tallmadge Hdwe. Co	Hardware	20	2 20
	The Flk. Laundrying Co	Laundering	21	4 50
	J. G. Biddle	Dynamometer spring	22	2 09
	Tallmadge Hdwe. Co	Hardware	23	70
	Geo. Martin	17½ hours @ 15c	24	2 62
	A. L. Buckman	5 yards paper @ 4c	25	20
	A. E. Loeb	1½ hours @ 15c	26	22
	G. E Stechert	1 book	27	1 93
	Payne M. D. Hdw. Co	Cans, etc	28	21 13
	Frankenberg Bros	Boxes, cards, etc	29	1 70
	Glass & Pot. Wld. Co	1 year's subscription	30	1 00
	The Seraphim Bindery	Book binding	31	62 95
	Kelton & Converse	Lumber	32	3 60
	C. H. Woodruff	12 hours carp. work @ 29⅓ c	33	3 33
	Kelton & Converse	Lumber	34	4 32
	Buckeye Buggy Co	Wagon shaft, top, etc	35	8 50
	Stitt, Price & Co	Lime	36	1 20
	O. V. Brumley	Cleaning skeleton of bull	37	5 00
	A. W. Kiler	Sulphur, etc	38	2 74
	W. B. Calkins	28 hours @ 15c	39	4 20
	N. P. Oglesby	116 "	40	17 40
	McClelland & Co	Tablets, ink eradicator	41	73
	W. U. Telegraph Co	Messages	42	1 98
	C. U. Telephone Co	Telephone service	43	1 05
	W. J. Davidson	Straw	44	1 00
	Mt. Gilead Pottery	Flower pots	45	11 45
	W. A. Kellerman	Postage, etc	46	2 88
	Strobridge Litho. Co	Diplomas, etc	47	118 50
	Col. Transfer Co	Carriage service	48	4 00
	Green, Joyce & Co	Ribbon	49	23 25
	C. O. Oil Co	1 barrel oil	50	11 13
	T. Ewing Miller	Office rent, 6 mo. to July 1, etc	51	111 90
	Schoedinger Fearn & Co	Hardware	52	98
	C. Durner	Sharpening tools	53	40 15
	Col. Brass Co	1 rubber ball for syphon	54	25
	Kelton & Converse	Lumber	55	12 95

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Total.
1897.				
July 1	H. Braun Sons & Co.....	Oil, etc.....	56	$5 70
	Col. Rubber & Belt'g Co.	Ties, etc	57	2 18
	Hanna Paint Mfg. Co...	Paint	58	4 05
	Col. Supply Co.....	Pipe and fittings.....	59	22 31
	A W. Kiler.....	4 pounds ocher.....	60	25
	Bissell, Dodge & E. Co..	100 feet conduit, etc.....	61	7 34
	Sawyerman Elec Co	Elect. supplies.....	62	82 56
	P. Hayden Foundry Co..	Grate bars	63	10 80
	Stitt, Price & Co.....	1 bbl. clay.....	64	2 00
	Joe Garretson.....	6 days @ $1.50.....	65	9 00
	S. T. Knight.....	200 feet sewer @ 20c.....	66	40 00
	A. E. Loeb.....	28 hours work @ 15c.....	67	4 20
	Geo. Martin.....	43½ " "	68	6 53
	H. S. Riddle.....	22 " "	69	3 30
	J. E. Brown.....	45 hrs. campus work @ 12½c...	70	5 63
	S. Sigler.....	110 " " ...	71	13 75
	D. N. Duncan.....	24 " " ...	72	3 00
	H. Chantler.....	116 " " ...	73	14 50
	W. R. Price..	91½ " " ...	74	11 40
	J. E. Appleten.....	20 " " ...	75	2 50
	J. C. Britton.....	203 " " ...	76	30 45
	C. G. Morrow.....	70 " " ...	77	8 75
	F. Rubins.....	11 " " ...	78	1 38
	A. F. Wilcox	227 " " ...	79	34 05
	W. Chantler.....	61 " " ...	80	7 63
	W. Gilmore.....	15 " ...	81	1 88
	H. H. Loomis.....	22 " ...	82	2 75
	T. J. Dundon & Co.....	Lumber.....	83	148 67
	Engelke & Bigelow.....	Freight and cartage..... ...	84	513 40
	C., H. V. & T. Ry. Co...	"	85	48 30
	C., C., C. & St. L. Ry. Co	"	86	8 31
	F. Ward.....	Weighing material	87	31 66
	Taylor, Beall & Co.....	Stone	88	238 25
	Bedford Stone Co.....	Bedford stone.....	89	218 69
	R. A. McClure..	Mill work.....	90	800 00
	J. W. Coulson.....	Painting and glazing.....	91	100 00
	Van Dorn Iron Wks. Co.	Joist hangers.....	92	50 92
	C., S & H. Ry. Co.....	Freight	93	709 19
	Lawrence Press Co.....	Scratch pads.....	94	75
	Col. Brick & Terra.C.Co.	Press brick.....	95	849 12
	F. O. Schoedinger.....	Heating and vent. pipes.....	96	202 90
	Standard Oil Co..	Engine oil.....	97	1 05
	W. U. Terra Cotta Co...	Terra cotta.....	98	1,500 00
	Ruggles-Gale Co	Stationery, etc.....	99	13 35
	B &. O. Ry. Co.....	Car service.....	100	20 50
	Champlin Printing Co..	Printing	101	2 50
	Col. Supply Co.....	Sundries	102	47 35
	Bldg. Material Sup. Co..	Ties..	103	149 00
	Fultonham Brick Co.....	Common brick.....	104	777 40
	SchoedingerFearn&Co.	Hardware	105	106 72
	Col. Sewer Pipe Co.....	Pipe	106	23 18
	Kilbourne-Jones Co.....	Hardware	107	33 73
	Homegartner Sand Co..	Sand	108	60 46
	Penn. Fuel Co.....	Lime.....	109	371 49
	Fred Kuhn.....	16 hrs. st. cut. Town Hall 40c..	110	6 40

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
July 2	F. F. D. Albery	3 lectures law school	111	$12 00
3	E. B. Kinkead	228 law lectures, @ $1.00	112	228 00
	E. O. Randall	121 " "	113	121 00
	D. F. Pugh	136 " "	114	136 00
	J. H. Collins	19 " "	115	19 00
	W. H. Page	218 " "	116	218 00
	G. W. Knight	82 " "	117	82 00
	Homegartner Sand Co	Sand	118	89 24
	Penn. Fuel Co	Hauling sand	119	19 12
	Paul Jones	55 law lectures @ $1.00	120	55 00
	F. F. D. Albery	34 " "	121	34 00
	J. H. Randall	15 hours carpenter work @ 25c	122	3 75
	C. H. Woodruff	Carpenter work	123	43 30
	G. W. Knight	lecture law school	124	4 00
	F. A Ferguson	13½ hours brick laying @ 15c.	125	2 00
	J. T. Mack	Exp. at meetings June 28-29	126	21 52
	E. O. Randall	1 lecture, college of law	127	4 00
7	F. M. Senter, P. M	100 2-cent, 200 1-c. post.stamps	128	4 00
8	Annis McLaughlin	Addressing envelopes	129	60
	D. C. Huddleson	49 hrs. wk.' catalogues, etc	130	7 35
	R. J. Seymour	206 " guide, messenger	131	25 75
	W A. Snow	30 " record office	132	4 50
	Columbus Gas Co	Gas	133	83 17
23	I S. Isabel	Brick work, Bio. Hall	134	30 00
	Harry Boyd	"	135	13 25
	C. R. Smith	"	136	7 85
	Al. Smith	"	137	4 50
	Wm. Topland	"	138	14 40
	Jno. McDavis	"	139	16 20
	E. Baker	"	140	7 85
	C. Richardson	"	141	7 85
	C. Lentner	"	142	8 10
	Tom Hayes	"	143	13 50
	N. Selby	"	144	11 45
	Lewis O'Brien	"	145	4 25
	John Morgan	"	146	14 40
	Jas. Bundy	"	147	14 10
	J. Alexander	"	148	13 65
	J. T. Davis	"	149	4 95
	Robert Nicholson	"	150	6 15
	N. Burke	"	151	6 15
	P. Selby	"	152	2 40
	Orvil Barrow	"	153	1 60
	Wm. Robinson	Stone work, Bio. Hall	154	19 60
	C. A. Bradley	"	155	17 60
	W. A. Schriner	"	156	17 60
	M. Miller	"	157	14 40
	A. Reibly	"	158	14 40
	A. Deckard	"	159	11 60
	J. Terrell	Labor, Bio. Hall	160	11 30
	J. S. Handley	"	161	10 80
	T. Cahill	"	162	6 75
	Wm. Taylor	"	163	3 35
	P. Knopf	"	164	23 60
	F. A. Ferguson	Brick work, Townshend Hall.	165	21 25

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
July 23	A. Wetzel	Brick work Towns. Hall	166	$9 00
	Geo. Steele	"	167	12 60
	Ben Slocum	"	168	4 40
	W H. Butler	"	169	2 70
	Wm. Bl nco	"	170	9 00
	Ed. Isabel	"	171	4 70
	Tom Vennard	Stone work Towns Hall	172	23 40
	Jas. Cunningham	"	173	26 80
	J. Otto	"	174	40
	Tom Barton	"	175	40
	O. F. Tipton	"	176	14 20
	J. B. Tarbett	"	177	8 10
	Geo. Lowey	"	178	2 55
	E. Williams	"	179	6 90
	H. Cummins	"	180	4 95
	E. A. Warley	"	181	12 90
	P. Marrott	"	182	7 75
	Will Hayes	"	183	4 80
	Joe Scheiser	"	184	8 20
	Geo. O'Harra	"	185	1 50
	T. H. Whiteman	"	186	5 80
	O. P. Wise	Carpenter work Towns. Hall	187	14 40
	D. B. Jacobs	"	188	3 20
	W. R. Daily	"	189	2 80
	W. H. Noe	"	190	2 80
	T. Whiteman	Teaming & haul'g Towns. Hall	191	50 00
	J. Wilson	"	192	29 85
	P Ryan	"	193	42 80
	Wm. Robinson	Labor, Drill Hall	194	13 50
	E. A. Worley	"	195	6 85
	F. L. Power	"	196	8 00
	Peter Marrott	"	197	6 85
	Jas. Terrill	"	198	6 85
	Geo. Steele	"	199	6 85
	J. S. Handley	"	200	6 85
10	F. M. Senter, P. M	100-1c., 100-2c., stamps	201	3 00
	H. E. Kennedy, Supt	Pay-roll, laborers, Towns. Hall	202	1,930 50
	H. E. Kennedy, Supt	" Drill Hall	203	20 25
	H. E. Kennedy, Supt	" Bio. Hall	204	246 40
	H. E Kennedy, Supt	Services, 1 mo., per contract	205	350 00
13	C. L. Wattering	Pay work on Towns. hall	206	67 77
	G. E, Jaeger	Bricklayer, 20 hrs, @ 45c. T. hall	207	9 00
	T. Weiner	23 hrs. wk. @ 15c. Towns. Hall	208	3 45
15	John Gerling	16½ hrs. wk. @ 45c. "	209	7 40
	J. Cullen	19½ hrs. wk. @ 15c. "	210	2 90
	J. E. Manning	31 " "	211	4 65
	M. Niskell	31½ " "	212	4 70
	A. Zink	32½ hrs. wk. @ 45c. "	213	14 60
22	Olive B. Jones	1/10 sal. 1st inst. yr. end. June '98	214	120 00
23	Z. Heed	Time keeper O. S. U building	215	64 65
	Chas. Wacher	Hauling gravel Towns. Hall	216	18 45
	Annie Arnold	Serv. O. S. U. bldgs. stenogpr.	217	20 00
24	H. E. Kennedy	Pay roll laborers, Towns. Hall	218	2,578 65
	H. E. Kennedy, Supt	" Bio. Hall	219	756 35
	H. E. Kennedy, Supt	" Armory & Gym	220	1,456 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
July 24	W. Smith	14 hrs. brick laying @ 45c	221	$6 30
	Fred Pursell	8 "	222	3 60
26	F. M. Senter, P. M	1200-2c., 700-1c. stamps	223	31 00
	M. Gilmartin	14 hrs. bri'k layer helper @ 15c	224	2 10
24	James Whissell	12 d. foreman Biol. bldg. @ $5	225	60 00
26	James Whissell	5 d. foreman arm.& gym. @ $5	226	25 00
27	T. Hodge	24 hrs.br'k layer " @ 45c.	227	10 80
	C. L. Watering	Hauling brick	228	165 73
	Fred Wassimuth	16 hrs. brick laying @ 45c	229	7 20
28	D. R. Beynon	14 " 45c	230	2 10
	Wm. Robinson	34 " 45c	231	5 10
	Alexis Cope	Salary for July, 1897	232	187 50
29	A. J. Seymour	134 hrs. guide work @ 12½c	233	16 75
	Wm. Kahler	Sharpening tools	234	2 60
	W. R. Beattie	Salary for July, 1897	235	54 17
31	J. H. Canfield	"	236	500 00
	Jean Blackford	"	237	50 00
	Edith Cockins	"	238	54 17
	W. C. McCracken	"	239	125 00
	Chas. Low	"	240	54 17
	Wm. Standly	"	241	45 00
	B. Le Bay	"	242	45 00
	G. R. Rose	"	243	65 00
	P. Cottingham	"	244	45 00
	F. B. Brewer	"	245	40 00
	John Adams	"	246	40 00
	John Conrad	"	247	40 00
	Thos. Alveo	"	248	40 00
	Arthur Chantler	"	249	30 00
	Frank Metz	Labor Towns. Hall	250	32 00
	F. M. Senter P. M	Postage acct. O. S. U. Bulletins.	251	10 00
	Abe Harris	35 hrs. cutting stone @ 15c	252	5 25
30	John Kunz	22½ " 35c	253	7 80
	C. Bolt	22¼ " 35c	254	7 80
	Chris Schafer	22¼ " 35c	255	7 80
	W. K. Moorehead	Salary for July, 1897	256	50 00
31	Jas. Kelly	"	257	41 67
	C. B. Hine	"	258	50 00
	Edw. Stalter	"	259	20 00
	B. Seliger	22½ hrs. brick laying @ 45c	260	10 55
Aug. 2	Mary H. Cope	Salary for July, 1897	261	40 00
4	W. I. Chamberlain	Exp. board meeting Aug. 4, '97	262	12 80
	J. McLain Smith	"	263	9 75
	Yost & Packard	Services as architects	264	500 00
	Peters,Burns & Pretz'g'r	" Towns. Hall	265	1,000 00
	E. B. Kinkead	228 spec. lectures law school	266	285 04
5	E. O. Randall	121 "	267	151 25
	D. F. Pugh	136 "	268	170 00
	J. H. Collins	19 special lectures @ $1.25	269	22 45
	W. H. Page	218 " $1.25	270	272 50
	G. W. Knight	82 " $1.25	271	102 50
	Paul Jones	55 " $1.25	272	68 75
	F. F. D. Albery	34 " $1.25	273	42 50
	J. A. Thompson	Salary for July, 1897	274	13 50
	Lucy Allen	4 wks. library wk. @ 12½c. hr.	275	24 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Aug. 5	C. U. Telephone Co.	Telephone rent	276	$56 45
	Mc lelland & Co.	Rubber bands, note book	277	2 02
	C. T. Howe	Orchestra, commencement	278	32 00
	Chittenden Hotel Co.	Expenses, Dr. Draper	279	3 00
	Alexis Cope	Exp. to meet'g A. A. L. G. C. July, '97	280	56 35
	Thos. F. Hunt	" "	281	52 00
	W. U. Telegraph Co.	Messenger	282	27
	Cherington P. & E. Co.	2 rubber stamps	283	50
	Col. Transfer Co.	Carriage service	284	4 00
	Warren Atkinson	Extra wk for Pres. as stenog.	285	5 00
	F. W. Prentiss	Salary for July, 1897	286	33 33
	Tracy-Wells Co.	Sponges. hammers, etc.	287	10 64
	Monypeny Ham. Co.	Lye	288	3 75
	H. Braun, Sons & Co.	10 gal. oil, etc	289	3 75
	Blackwood, Green & Co.	Gas stove, etc	290	6 60
	Florence D. Cope	18 days wk. @ $1.50	291	25 00
	Masury, Young & Co.	1 barrel nodusto	292	63 00
	J. R. Spurrier	45½ hrs. @ 20c	293	9 10
	Violet Zimmerman	4 days @ $1.00	294	4 00
	M. C Zimmerman	5½ " $1.00	295	5 50
	Mrs. Handley	1½ " $1 00	296	1 50
	Mitchell Adv. Co.	Time card	297	1 00
	R. L. Polk & Co	1 directory	298	5 00
	Yardley & Harsh	100 ft. rubber hose	299	13 00
	A. McLaughlin	9 hrs. clerk @ 15c	300	1 35
	D. C. Huddleson	7½ " @ 12½c. wk., Orton Hall	301	93
	M. Armbruster	Serv. commencement day	302	3 00
	Penn Fuel Co.	Lime, cement, etc.	303	598 76
	C. A. & C. R. R.	Freight on 6 cars brick	304	133 28
	J. Wiggins & Co.	Printing 200 contracts	305	3 00
	Penn Fuel Co.	Coal	306	14 55
	E. A. Cole & Co.	"	307	2 29
	Blackwood, Green & Co.	Nails, rope, hose, etc.	308	27 38
	Benj Rushmer	Blacksmithing, etc	309	26 90
	T. J. Godfrey	Exp., meet'g Aug. 4-5, 1897	310	10 80
	J. C. Porterfield	Rent of gun, 2 boxes shells	311	2 55
	Wm. Burdell, Jr.	Harness, etc	312	9 30
	G. C. Cross Lumber Co.	Lumber	313	1 92
	J. Yoakum	Grinding corn	314	6 00
	H. Cole	Thermometers, etc	315	7 10
	Nitschke Bros.	Letter heads, etc	316	9 50
	A. W. Livingston's Sons.	Dam., crops by O. S. U. cattle	317	15 00
	W. H. Page	52 lectures @ $4.00	318	208 00
	F. S. Johnston	72 hrs. stenog. @ 12½c.	319	9 00
	H. Haerlein	Services as landscape gard'ner	320	51 40
	Blackwood, Green & Co.	1 rake, sickle, etc	321	3 40
	J. H. Brown	174 hrs. @ 13½c.	322	23 49
	W. H. Gilmore	88 " @ 12½c. on campus	323	11 00
	C. K. McClelland	22 " "	324	2 75
	W. C. Stocks	20 " "	325	2 50
	W. R. Price	219 " "	326	27 38
	J. F. Travis	20 " "	327	2 50
	G. A. Flickinger	92 " 15c. "	328	13 50
	J. C. Britton	283 " "	329	42 45

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Aug. 5	A. F. Wilcox	237 hours @ 15 cts. on campus	330	$35 55
	G. A. Flickinger	55 " " "	331	8 25
	H. H. Loomis	50 " @ 12½ "	332	6 25
	W. R. Price	55 " " "	333	6 88
	A. F. Wilcox	55 " @ 15 cts	334	8 25
	Central Electric Co.	Sockets, switches	335	71 42
	Water Department	Water meter, etc.	336	144 70
	B. D. Potts	Fittings, pipe	337	252 86
6	A. R. Richards	55 hours @ 5 cts. on campus	338	2 75
	S. T. Knight	Lab. & mate'ls, tun'l, Hayes H'l	339	643 27
	Marion Peck	26 days @ $1.50	340	39 00
	J. R. Spurrier	81 hours @ 20 cents	341	16 30
	C. H. Woodruff	Carp work	342	59 54
	Thos. Bonde	31½ days @ $1.50	343	47 25
	H. Chantler	17 days' work @ $1.50	344	25 50
	J. L. D. Nicols	26 days @ $1.50	345	39 00
	Col. Rubber & Beltg. Co.	Pipe, etc	346	143 36
	Engelke & Bigelow	Freight and cartage	347	10 28
	Tallmadge Hardw'e Co.	Hardware	348	16 37
	Spahr & Glenn	Printing cert. of indebt., etc.	349	48 05
	Kelton & Converse	Lumber	350	26 78
	Cap. City Mach. Works.	Lock, nuts, etc	351	13 21
	Bausch & Lomb Op. Co.	1 microscope	352	27 00
	C. O. Paper Co.	1 ledger, etc	353	18 15
	Edna Armstrong	149 hrs at @ 15 cts. in bot. lab.	354	22 35
	Freda Detmers	103½ " on herba'm	355	20 70
	W. A. Kellerman	Bot. lab. supplies	356	13 61
	J. K. Small	51 specimens bot. museum	357	5 00
	Payne McD. Hdw. Co.	Hardware	358	5 71
	Kimball & Mathews	Card board, etc	359	6 56
	J. Carbutt	Photo plates	360	2 10
	Kauffman-Lattimer Co.	Chemicals	361	19 90
	J. H. Randall	6½ hours carp work @ 25 cts.	362	1 63
	C. H. Woodruff	31 " @ 27½ cts.	363	8 61
	Kelton & Converse	Lumber	364	1 25
	Tallmadge Hdw. Co.	Hardware	365	3 04
	Coe & Spencer	Drawing table and stool	366	8 50
	Buff & Berger	1 current meter	367	144 50
	F. F. Bonnet	1 centennial timer	368	6 00
	Morse Machine Co.	1 B. P. frame	369	24 00
	New Col. Bridge Co.	Track for blue pt. frame	370	15 00
	H. Cole	3 batteries, etc	371	19 15
	Weiman Machine Wks.	Castings, tubing, etc	372	11 12
	Payne McD. Hdw. Co.	Hardware	373	18 11
	W. F. Lavery	Paint'g & repair'g Vet Hosp.	374	23 00
	T. J. Dundon & Co.	Lumber	375	2 52
	J. W. Bradford	Typewriting 190 pp	376	12 00
	Coe & Spencer	Lumber	377	22 00
	Hann & Adair	1 record book, etc	378	4 50
	J. B. Allen, Clerk	Bal. due cl'k Sup. Ct., law exam	379	39 95
	Spahr & Glenn	Printing exam. questions	380	8 75
	Columbus Supply Co	Fittings	381	3 25
	Tallmadge Hardw'e Co.	Hardware	382	1 40

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897				
Aug. 6	Kelton & Converse	Lumber	383	$6 93
	H. H. Walling	Painting Obs. dome, etc	384	29 50
	Edw. Orton	Specimens, etc., Geo. museum	385	22 27
	W. K. Moorehead	Purchase of specimens	386	50 95
	F. O. Schoedinger	Repairing conductors, etc	387	3 68
	Blackwood, Green & Co	Hardware	388	9 09
	Lewis Fink	Varnish, labor etc	389	10 42
	Col. Rubber & Beltg. Co	Pipe, etc	390	18 74
	Col. Supply Co	Fittings	391	8 02
	Joe Garretson	25 days work, @ $1.50	392	37 50
	Col. Supply Co	Pipe, etc	393	135 62
	Col. Brass Co	Lever, etc	394	1 97
	Blackwood, Green & Co	1 copper condenser	395	29 00
	B. D. Potts	Fittings	396	9 93
	A. Earl	Lumber	397	10 50
	J. H. Randall	47½ hrs. carp. work, @ 25c	398	11 87
	Jas. Stainbrook	26 days work, @ $1.50	399	39 00
	O. T Corson	Adv. in Ohio Ed. Monthly	400	29 00
	Champlin Ptg. Co	Ptg. reports, circulars, etc	401	107 75
	Toledo High Sch. An	Advertising	402	5 00
	Hann & Adair	1,000 catalogue envelopes	403	2 75
	Toledo Commercial	Adv. props. for bonds	404	13 15
	Hann & Adair	Paper and envelopes	405	3 05
	O. T. Corson	1 page ad. in O. E. Monthly	406	22 50
	W. R. Davis	Ad. in "Spider Webb"	407	5 00
	G. H. Durand	Ad. in Oberlin Annual	408	10 00
	Webb Sta. & Ptg. Co	1,000 letter heads	409	6 50
	O. S. Journal Co	Advertising	410	8 00
	Lancaster A. & C. Herald	"	411	10 00
	C. O. Paper Co.	1 ruled book, etc	412	21 95
	Chas. Schaup	31 days @ $2 supt. tunnel	413	62 00
	Enquirer Co	Adv. proposals	414	16 03
	F. O. Schoedinger	Galv. iron pipes	415	150 00
	T. J. Dundon & Co	Lumber	416	1,427 26
	R. A. McClure	Mill work	417	500 00
	Fitzpatrick & Hoepfner	Plumbing and heating	418	100 00
	Col Brick & Ter. C. Co.	Brick	419	1,067 69
	Buckeye Press Brick Co.	"	420	403 52
	Adam Wagner	Rent of brick hoist	421	46 00
	M. J. Bergin Lumber Co	Lumber	422	2,000 00
	Saunders & Esswein	Plumbing Towns Hall	423	900 00
	Void		424	0 00
	T. J. Dundon & Co.	Lumber	425	940 62
	Pedrick & Ferris	Mortar	426	198 11
	Homegartner Sand Co.	Sand	427	230 75
	Schoedinger, Fearn & Co	Hardware	428	122 04
	Fifth Ave. Coal Co	Coal and weighing material	429	27 45
	W. U. Telegraph Co	Teleg. service	430	11 20
	Fultonham Brick Co.	Brick	431	1,343 20
	C., S. & H. Ry. Co	Freight	432	791 53
	Kilbourne-Jones Co	Hardware	433	42 67
	Coe & Spencer	Lumber	434	112 20
	C. U. Telephone Co	Telephone service	435	16 50
	C., H. V. & T. Ry. Co	Freight	436	100 62
	T. & O. C. Ry. Co	Freight and switching	437	7 75

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Aug. 6	B. & O Railway Co.....	Freight.....	438	$107 18
	C. O. Paper Co.....	Sheathing, etc.....	439	35 52
	Taylor, Mantel & G. Co.	Frames.....	440	22 00
	Acme Paving Co.....	Cement and cinders.....	441	12 90
	C. Durner.....	Sharpening tools.....	442	63 11
	Ruggles-Gale Co.....	Office supplies.....	443	12 15
	C. E. Morris.....	Iron.....	444	51 25
	Col. Sewer Pipe Co.....	Flue linings.....	445	9 15
	Col. Supply Co.....	Supplies.....	446	15 13
	L. Bowen Sons.....	Mortar color.....	447	90 87
	Lawrence Press Co.....	Office supplies.....	448	25 70
	Standard Oil Co.....	Oils.....	449	3 43
	B. D. Potts.....	Pipe.....	450	24 00
	Bldg. Material & Sup. Co	Wall ties.....	451	165 69
	Engelke & Bigelow.....	Freight and cartage.....	452	100 43
	Climax Stone Co.....	Stone.....	453	68 60
	M. D. Grary.....	Grindstone.....	454	2 50
	F. J. Kistler.....	Coal.....	455	14 78
	C., C., C & St. L. Ry. Co	Freight and switching.....	456	56 54
	Taylor-Beall Co.....	Stone.....	457	100 00
	S T. Knight.....	Sewerage, Biol. building.....	458	45 00
7	H. E. Kennedy Supt.....	Pay roll, laborers Biol. Bldg...	459	749 25
	H. E. Kennedy Supt.....	" Arm & Gym.	460	1,798 45
	H. E. Kennedy Supt.....	" Towns. Hall.	461	1,917 40
	John T. Mack.....	Exp. mt'gs b'd July 27, A. 4, '97	462	19 40
9	Wells-Fargo Co.....	Express charges.....	463	60
10	H. E. Kennedy.....	Serv. Supt. const. & expenses..	464	376 47
11	C. L. Wattering.....	Hauling brick.....	465	113 45
12	F. W. Prentiss, Treas...	B. E. order Ca. F. Kahlbaum, marks 29, 45.....	466	7 14
	Col. Brick & Terra C. Co	Press brick, Towns. Hall.....	467	490 00
13	Col. Gas Co.....	Gas for July, 1897.....	468	50 31
	Am. Express Co.....	Express charges.....	469	65
14	Thos Slone.....	72½ hrs. b. layer's help'r @ 15c.	470	10 85
17	Frank Paterson.....	20 hrs. bricklaying @ 45c.....	471	9 00
16	Adams Express Co.....	Express charges.....	472	30
17	Geo. Atherton.....	28 hrs. bricklaying @ 45c.....	473	12 60
18	Adams Express Co.....	Express charges.....	474	25
20	Oakland Press Bk. Co...	Brick.....	475	89 35
21	H. E. Kennedy, Supt.....	Pay roll, laborers Arm & Gym	476	2,290 65
	H. E. Kennedy, Supt.....	" Biol. Bldg....	477	1,129 20
	H. E. Kennedy, Supt.....	" Towns. Hall.	478	1,813 40
	J. A. Thompson.....	Work in greenhouse.....	479	28 75
23	Col. St. Ry. Co.....	5 packages car tickets.....	480	5 00
	E. T. Garner.....	16 hrs. bricklaying @ 45c.....	481	7 20
	Chas. Paulin.....	" "	482	7 20
24	C. Farley.....	18 hrs. carp. work @ 25c.....	483	4 50
	C. L. Wattering.....	Hauling brick.....	484	122 56
25	E. W. Tucker.....	16 hrs. bricklaying @ 45c.....	485	7 20
	U. S. Express Co.....	Express on app.....	486	2 80
26	Jas. H. Canfield.....	Salary for August, 1897.....	487	500 00
27	Arthur Chantler.....	Sal. as Jan. Orton hall & libr'y	488	45 00
26	Alexis Cope.....	Salary for August, 1897.....	489	187 50
	W. C. McCracken.....	" "	490	125 00
	Jean Blackford.....	" "	491	50 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1896.				
Aug. 26	Edith Cockins	Salary for Aug., 1897	492	$54 17
	W. K. Moorehead	" "	493	50 00
	C. B. Hine	" "	494	45 00
	Chas. Low	" "	495	54 17
	Wm. Standley	" "	496	45 00
	Benj. LeBay	" "	497	45 00
	G. R. Rose	" "	498	65 00
	P. Cottingham	" "	499	45 83
	Mary H. L. Cope	" "	500	40 00
	Jas. Kelly	" "	501	41 67
	Fred Brewer	" "	502	40 00
	John Adams	" "	503	40 00
	John Conrad	" "	504	40 00
	Edw. Stalter	" "	505	20 00
	J. A. Thompson	" "	506	13 50
	W. R. Beattie	" "	507	54 17
	Wm. Stock	30½ hrs. bricklaying @ 45c	508	13 70
	Ed. Voeglin	16 "	509	7 20
	Henry White	43 hrs. bricklaying @ 15c	510	6 45
27	U. S. Express Co.	Express charges	511	50
	John Griffin	9 hours stone work @ 35c	512	3 15
28	H. Blaney	53 hours laying brick @ 15c	513	7 95
	Wm. Whitestine	Salary for Aug., 1897	514	45 00
30	Robt. Amker	26½ hrs. bricklaying @ 15c	515	3 95
	Louis Dean	27 hours labor @ 15c	516	4 05
	E. West	40 "	517	6 00
31	J. L. Chriswell	74½ "	518	11 15
	U. S. Express Co.	Express charges	519	25
	Herald Ptg. Co.	Report blanks	520	7 25
	W. Annat	38½ yards muslin @ 6¾c	521	2 60
	Ohio. Agr. Exper. Sta.	Envelopes, etc	522	1 73
	Engelke & Bigelow	Freight and cartage	523	13 45
	Walworth Run Fdy. Co.	Railroad cars and track	524	121 25
	Arthur Richards	178 hours campus work @ 5c	525	8 90
	H. H Loomis	207 hrs. campus work @ 12½c.	526	25 88
	H. S. King	70 " "	527	8 75
	J. C. Britton	225 hrs. campus work @ 15c.	528	33 75
	Wm. Gilmore	104 hrs. campus work @ 12½c.	529	13 00
	J. A. Thompson	62 " "	530	7 75
	S. Teter	75 " "	531	9 38
	H. Huff	70 " "	532	8 75
	C. K. McClelland	44 " "	533	5 50
	J. H. Brown	184 hrs. campus work @ 13½c.	534	24 84
	Geo. Wooton	14 hours labor @ 15c	535	2 10
	W. M. Taylor	13 " "	536	1 95
	T. J. Godfrey	Exp. at meet'g of Com. 8 31-'97	537	5 15
	W. R. Price	64 hrs. campus work @ 12½c.	538	8 00
	A. F. Wilcox	141 hours campus work @ 15c	539	21 15
	C. W Clark & Co.	200 oak stakes	540	6 00
	G. A. Flickinger	208 hours campus work @ 15c	541	31 20
	Blackwood, Green & Co.	1 copper box, etc	542	7 50
	D'Este & Seeley Co.	Balanced steam trap	543	28 00
	Kilbourne-Jones Co.	5 dozen cabinet clamps	544	8 75
	Thos. Boude	29 days @ $1.50	545	43 50
	Jas. Stainbrook	26 "	546	39 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Aug. 31	M. Peck	21½ days @ $1.50	547	$32 25
	Westinghouse Elec. Co.	2 100-Amp. dynamo switches	548	36 00
	W. K. Moorehead	Specimens, etc	549	100 00
	Schoedinger, Fearn & Co	Screws	550	1 03
	Stronberg C. Telep. Co.	Exp. charges and boxing	551	1 85
	Kelton & Converse	Lumber	552	4 40
	C. H. Woodruff	13 hrs. carp. work @ 27½c	553	3 61
	O. A. Davis	3¼ hours at elect. lab. @ 17½c	554	58
	J. H. Randall	9 hours carp. wrk @ 25c	555	2 25
	W. E. Chappell	13 hours elect. lab wrk @ 15c	556	1 95
	S. Obermayer & Co	2 steel wire brushes	557	1 70
	Tallmadge Hdw. Co.	Hardware	558	10 45
	P. Hayden Foundry	1 pig copper 26 lbs	559	3 90
	E. A. Kinsey Co.	2 sets jaws	560	7 20
	Nitschke Bros	1500 letter heads	561	4 50
	Cap. City Machine Wks.	23 hours work on wheel, etc	562	9 88
	Columbus Brass Co.	Brush, castings, etc	563	1 55
	Ruggles-Gale Co	1 record, etc	564	5 30
	C. E. Nicholas	Zinc, etc	565	8 44
	G. E. Stechert	1 book	566	6 25
	Central Electric Co	28 coppers	567	12 19
	F. W. Prentiss	Salary for August, 1897	568	33 33
Sept. 1	Green, Joyce & Co.	Towels	569	15 00
	Kauffman-Lattimer Co.	Drugs and chemicals	570	63 45
	W. J. Corns	Painting Botan. Hall	571	75 00
	H. Braun Sons & Co	Oil, etc	572	6 82
	Lewis Fink	Papering	573	47 10
	Kelton & Converse	Lumber	574	9 53
	Warren Atherson	4 d. paint'g Pres. barn @ $1.50	575	6 00
	Blackwood, Green & Co.	Hardware	576	134 31
	J. H. Randall	Carpenter work	577	34 50
	C. H. Woodruff	"	578	57 76
	A. F. Wilcox	83 hours work @ 15c	579	12 45
	Chas. Dorsey	102 " "	580	15 30
	A. E. Loeb	28 " "	581	4 20
	J. L. D. Nichols	4½ days @ $1.50	582	6 75
	A. F. Fenstermaker	Papering phys. laboratory	583	24 00
	H. L. King	43 hours painting @ 15c	584	6 75
	C. J. Slyh	Cleaning 3 vaults	585	34 00
	D. C. Huddleson	104 hours guide work @ 12½c	586	13 00
	R. J. Seymour	58 " "	587	7 25
	Quinins & Ridenour	2 files	588	35
	Columbus Supply Co.	Pipe and fittings	589	188 75
	J. M. & W. Westwater	Fixtures	590	19 00
	McAllister, Mohler & Co	Office chairs	591	11 50
	Hann & Adair	Office supplies	592	2 58
	McClelland & Co.	Paper and envelopes	593	1 50
	C. U. Telephone Co	Telephone rent	594	4 45
	Hasbrook & Byers	1 jug and glass	595	35
	Tallmadge Hdw. Co.	Shears and knife	596	2 50
	Chering'n Ptg. & Eng. Co	1 pen holder	597	20
	Am. Dist. Teleg. Co.	Rent of signal boxes	598	37 55
	Columbus Mdse. Co.	Twine, etc	599	64
	A. H. Smythe	Cleaning typewriter	600	1 00
	W. U. Telegraph Co.	Messages	601	2 56

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Sept. 1	P. F. Yoerger	Lettering and sign	602	$3 75
	I. H. Miller	Rent of office, July, 1897	603	20 00
	W. C. Willard	Clerical asst. secy. office	604	24 50
	D. McAllister	10 bushels seed	605	14 00
	J. Wiesheimer	Meal	606	8 60
	H. A. Coe	Thresh'g 591 bu. wheat @ 3½c.	607	20 70
	Sterling Mfg. Co	1 apron for foundry, etc.	608	9 84
	Geiser Mfg. Co	1 gear arm	609	2 75
	Landon Ptg. & Pub. Co.	3,000 reports, etc	610	6 10
	Flint & Walling Mfg. Co.	1 spray pump	611	6 50
	F. S. Johnston	118 hours work @ 12½c	612	14 75
	Frank Miller	47½ hours labor @ 15c	613	7 10
	Nitschke Bros	Folders, ink, etc	614	13 75
	Hann & Adair	Office sundries	615	15 60
	Werner Co	100 litho. certificates of indbt.	616	75 00
	Agricultural S. Pub. Co.	Advertising '97–'98	617	80 00
	Spahr & Glenn	150 copies newspaper slips	618	2 25
	Windsor & K. Pub. Co.	½ page adv. Aug. 1, 1897	619	10 00
	Leader Printing Co	Advertising proposals	620	12 90
	Webb Sta. & Ptg. Co	Stationery	621	9 10
	Lawrence Pub. Co	Advertising	622	70 00
	Farm. Home Pub. Co.	"	623	28 00
	Nat'l Stockman & Far.	56-line ad	624	67 20
	Mast Crowell & K	Advertising	625	35 00
	Am. Grange Bulletin	"	626	16 80
	Harper Ill. Syndicate	Cut of Towns. Hall	627	3 75
	Orange-Judd Co	Advertising	628	3 50
	Tallmadge Hdw. Co	Hardware	629	9 91
	Col. Supply Co	Pipe and fittings	630	28 83
	S. T. Knight	360 feet sewer @ 20c	631	72 00
	Kelton & Converse	Lumber	632	30 22
	New Col. Bridge Co.	6 col. erected as per contract	633	176 50
	Col. Rubber & Beltg. Co.	Pipe, etc	634	158 32
	Engelke & Bigelow	Freight and cartage	635	11 20
	S. T. Knight	Final est. tunnel	636	570 56
	H. Chantler	22 days @ $1.50	637	33 00
	W. E. Chappell	34 hrs. elec. plant wk. @ 15c.	638	5 10
	J. R. Spurrier	91½ " 20c.	639	18 80
	A. E. Loeb	35 " 17½c.	640	6 13
	A. O. Davis	43 hrs. @ 17½c. " 7 hrs @ 15c.	641	8 57
	Bissell, Dodge & Erner Co	Conduits, rosettes, etc	642	32 80
	Post-Glover Elec. Co	Brackets, wire, etc	643	215 76
	Kauffman-Lattimer Co.	Muriatic acid	644	3 48
	Adam Wagner	Brick hoist and engine	645	45 55
	Am. En. Brick & Tile Co.	Enamel brick	646	1,178 26
	B. & O. Ry. Co	Freight	647	166 06
	Peters, Burns & Pretz'ger	Plans	648	20 00
	N. W. Terra Cotta Co.	Terra cotta	649	969 20
	S. T. Knight	Sewer	650	97 50
	N. Lex. Press Brick Co.	Brick	651	183 72
	T. & O. C. Ry. Co	Freight and switching	652	34 53
	J. F. Byers Mach. Co.	Grates	653	2 50
	Redett & Sons	Brick	654	187 30
	Champion Iron Co.	Iron	655	500 00
	Standard Oil Co.	Oil	656	1 05

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897				
Sept. 1	C. A. & C. Ry Co	Freight	657	$251 89
	Warthorst & Co	Brick	658	898 53
	Buckeye Press Br. Co	"	659	509 30
	Wm. Caldwell	Lumber	660	373 48
	Col. Supply Co	Sundries	661	1 05
	C. U. Telephone Co	Toll	662	75
	S. T. Knight	Sewerage	663	122 85
	L. Schreiber Sons. Co	Iron	664	500 00
	Fish Stone Co	Coping	665	56 29
	Yost & Packard	Manilla rope	666	35
	U. S. Express Co	Express charges	667	1 90
	Col. Brick & Terra C. Co	Brick	668	473 95
	Penna. Fuel Co	Coal, etc	669	86 67
2	J. W. Coulson & Co	Painting and glazing	670	200 00
	F. Ward	Weighing sand and lime	671	12 00
	Ruggles-Gale Co	Office supplies	672	50
	Schoedinger Fearn & Co	Hardware	673	7 28
	Engelke & Bigelow	Freight and cartage	674	822 70
	Taylor Mantel & G. Co	Tile floors and mill work	675	1,200 00
	C. S. & H. Ry. Co	Freight	676	649 79
	T. J. Dundon & Co	Lumber	677	866 13
	Climax Stone Co	Stone	678	709 21
	C. E. Morris & Co	Iron	679	30 10
	C. C. C. & St. L. Ry. Co	Freight and switching	680	8 00
	White & Pixley	Private telephone contract	681	25 00
	C. Durner	Sharpening tools	682	147 97
	Lawrence Press Co	Office supplies	683	1 85
	C. O. Paper Co	Roofing, sheathing, etc	684	151 70
	C. H. V. & T. Ry. Co	Freight	685	79 41
	Pedrick & Ferris	Mortar	686	249 04
	Fultonham Brick Co	Brick	687	481 07
	Adams Express Co	Express charges	688	50
	Taylor, Beall & Co	Stone	689	1,209 83
4	U. S Express Co	Exp. charges	690	90
	Adams Express Co	"	691	1 25
	H. E. Kennedy, Supt	Pay roll laborers, armory	692	2,960 60
	H. E. Kennedy, Supt	" Bio. bldg	693	1,660 30
	H. E Kennedy, Supt	" Towns. Hall	694	1,710 00
	Joe Garrettson	21½ d. plumber'shelper @$1.50	695	32 25
	C. B. Hine	Bal. salary for August, 1897	696	5 00
6	Am. Exp. Co	Express charges	697	1 80
7	J. C. Probasco	16 hrs. brick laying @ 45c	698	7 20
8	Col. Gas Co	Gas for August, 1897	699	50 62
	C. L. Wattering	Hauling brick	700	170 66
9	Adams Express Co	Exp. charges, trap, Boston	701	9 00
	S. E. Davis	39 hours @ 15c brick laying	702	5 85
10	W. I. Chamberlain	Exp. meeting Oct. 9, 1897	703	12 10
	J. McL. Smith	" "	704	5 00
	T. J. Godfrey	" "	705	8 50
	H. E. Kennedy	Salary Supt. of const. to Sept. 10, 1897 and expenses	706	370 20
	F. Charles	Hauling	707	1 50
11	A. F. Fenstermaker	Dressing desk in Lab	708	2 40
	W. U. Telegraph Co	Messages	709	2 71
	C. T. Herbert	30 hours lib. work @ 12½c	710	3 75

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897				
Sept. 11	J. A. Thompson	64 hours lib. wrk. @ 12½c	711	8 00
	Wm. Manning	46 hours labor at 15c	712	6 90
	C. W. Waid	36 hours jan. wrk. lib. @ 12½c	713	4 50
	Lucy Allen	44 hours Lib. work @ 12½c	714	5 50
	G. E. Stechert	Books	715	37 46
	Taylor-Austin Co	"	716	9 12
	D. Appleton	"	717	5 00
	W. A. Kellerman	"	718	16 00
	M. J. Bergin Lumb. Co.	Lumber	719	435 90
	Seraphim Bindery	Book binding	720	50 55
	J. H. Randall	23 hours carp. work, @ 25c	721	5 75
	C. H. Woodruff	22 " " 27 7-9c	722	6 11
	C. E. Schaup	17 days work, at $2	723	34 00
	F. M. Senter, P. M.	500 1c. stamps	724	5 00
14	J. T. Mack	Exp. attg. meetg. Sep. 10, '97	725	9 40
	E. N. Tucker	39½ hrs. brick laying, @ 45c	726	17 75
	E. Jaerger	17 " "	727	7 65
	A. D. Bleininger	On act. Natl. Brick Mfg. Schl.	728	5 00
	Frank McDonald	51 hours brick mason, @ 45c	729	22 95
	A. Leibfarth	31 hours stone cutter	730	12 40
15	J. Mosher	65½ hours bricklaying, @ 45c	731	29 45
	V. Ritchey	67½ " "	732	30 35
	Wm. Wyatt	45 hours labor, @ 15c	733	6 75
	Harry Vogle	59½ hours bricklaying, @ 45c	734	26 75
	E. Syker	81 hours labor, @ 15c	735	12 15
16	Chas. Joyce	86 " "	736	12 90
16	A. Wagner	80 hours bricklayer, @ 45c	737	36 00
	C. Kulp	65 " "	738	29 25
	E. L. Schultz	80 " "	739	36 00
17	J. T. Mack	Exp. at meetg. Aug. 17, '97	740	9 73
	H. A. Weber	1-10 sal. Sept. inst. 1897	741	225 00
17	Murphy Iron Works	½ Con. price furnace	742	600 00
	H. E. Kennedy, Supt	Pay roll, Drill Hall	743	3,992 75
	H. E. Kennedy, Supt	" Biol. building	744	1,724 70
	H. E. Kennedy, Supt	" Towns. Hall	745	987 00
20	Geo. Dolby	20 hours stonecutting, @ 15c	746	3 00
21	G. Russel	"	747	1 50
	Clarence Miller	38½ " @ 15c	748	5 75
	Wm. Becker	24 hours bricklaying, @ 45c	749	10 80
	C. R. Smith	13 "	750	5 85
	M. John	28½ hrs. wrk. Biol. bldg. @ 15c	751	4 25
	Sam Clark	Carp. work	752	3 45
23	P. F. Hunter	26 hours bricklaying, @ 45c	753	11 70
18	Thos. Algeo	16 days work, @ $1.50	754	24 00
25	A. M. Bleile	1-10 sal. Sept. inst., 1897	755	225 00
	W. A. Kellerman	"	756	225 00
	C. N. Brown	"	757	225 00
	A. C. Barrows	"	758	225 00
	Edw. Orton	"	759	225 00
	E. A. Eggers	"	760	225 00
	J. R. Smith	"	761	225 00
23	Wm. Wagner	46 hours bricklaying, @ 45c	762	20 70

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Sept. 25	G. W. Knight	1/10 salary, Sept. inst., 1897	763	$225 00
	W. R. Lazenby	" "	764	225 00
	S. C. Derby	" "	765	225 00
	R. D. Bohannon	" "	766	225 00
	W. T. Magruder	" "	767	225 00
	J. P. Gordy	" "	768	225 00
	W. H. Scott	" "	769	225 00
	B F Thomas	" "	770	225 00
	J. V. Denney	" "	771	225 00
	B. L. Bowen	" "	772	225 00
	D. S. Kellicott	" "	773	225 00
	A. L. Williston	" "	774	225 00
	N. W. Lord	" "	775	200 00
	G. B. Kauffman	" "	776	200 00
	Wm. McPherson	" "	777	200 00
	F. A. Ray	" "	778	200 00
	Edw. Orton, Jr	" "	779	180 00
	J. N. Bradford	" "	780	180 00
	G. W. McCoard	" "	781	160 00
	H. C. Lord	" "	782	150 00
	E. A. Hitchcock	" "	783	150 00
	W. D. Gibbs	" "	784	140 00
	P. G. Bowman	" "	785	140 00
	F. C. Caldwell	" "	786	140 00
	D. S. White	" "	787	140 00
	S. A. Norton	" "	788	120 00
	R. L. Fulton	" "	789	120 00
	Olive Jones	1/10 salary, Oct. inst., 1897	790	120 00
	J. E. Boyd	1/10 salary, Sept. inst., 1897	791	110 00
	C. E. Sherman	" "	792	100 00
	T. E. French	" "	793	100 00
	C. W. Mesloh	" "	794	100 00
	F. C. Clark	" "	795	100 00
	W. H. Siebert	" "	796	100 00
	A. W. Hodgman	" "	797	100 00
	J. R. D. Taylor	" "	798	100 00
	M. Dresback	" "	799	30 00
	J. A. Bownocker	" "	800	90 00
	W. A. Knight	" "	801	90 00
	C. W. Weick	" "	802	90 00
	C. C. Sleffel	" "	803	90 00
	C. W. Foulk	" "	804	85 00
	C. L. Arnold	" "	805	85 00
	K. D. Swartzel	" "	806	85 00
	C. A. Dye	" "	807	85 00
	J. S. Hine	" "	808	85 00
	J. H. Schaffner	" "	809	80 00
	Clark Wissler	" "	810	80 00
	W. L. Graves	" "	811	80 00
	C. A. Bruce	" "	812	80 00
	C. W. Burkett	" "	813	75 00
	F. Haas	" "	814	70 00
	A. E. Vinson	" "	815	65 00
	F. L. Landacre	" "	816	65 00
23	W. B. Underwood	50 hours labor @ 17½c	817	8 75

216654

STATEMENT II—Continued

Date.	To whom paid.	For what purpose.	No.	Total.
1897.				
Sept. 25	T. K. Lewis	1/10 sal. Sept. inst., 1897	818	$60 00
	Harriet Townshend	" "	819	55 00
	F. E. Kester	" "	820	55 00
	Maude Jeffrey	" "	821	50 00
	Gertrude Kellicott	" "	822	50 00
	W. H. Evans	" "	823	40 00
	J. T. Martin	" "	824	40 00
	J. R. Spurrier	" "	825	35 00
	H. W. Kuhn	" "	826	30 00
	H. Judd	" "	827	30 00
	J. H. Fox	" "	828	30 00
	C. T. Morris	" "	829	30 00
	J. F. Cunningham	" "	830	30 00
	J. G. Boyd	" "	831	25 00
	C. B. Fredericks	" "	832	25 00
	Robt. Fischer	" "	833	20 00
	E. T. Watson	" "	834	20 00
	W. F. Hunter	" "	835	250 00
	W. H. Page	" "	836	100 00
	E. B. Kinkead	" "	837	100 00
	D. F. Pugh	" "	838	70 00
	E. O. Randall	" "	839	65 00
	J. P. Jones	" "	840	35 00
	G. W. Knight	1/10 sal. Sept. inst., Law School.	841	25 00
	F. F. D. Albery	" "	842	15 00
	J. H. Collins	" "	843	10 00
	Jas. H. Canfield	Salary for Sept., 1897	844	500 00
	Thos. F. Hunt	1/10 sal. Sept. inst., 1897	845	250 00
	Alexis Cope	Salary for Sept., 1897	846	187 50
	W. C. McCracken	" "	847	125 00
	Jean Blackford	" "	848	50 00
	Edith Cockins	" "	849	54 17
	W. K. Moorehead	" "	850	50 00
	C. B. Hine	" "	851	50 00
	Chas. Low	" "	852	54 17
	Wm. Standley	" "	853	45 00
	Benj. LeBay	" "	854	45 00
	G. R. Rose	" "	855	65 00
	Mary H. Cope	" "	856	40 00
	Jas. Kelly	" "	857	41 67
	F. B. Brewer	" "	858	40 00
	John Adams	" "	859	40 00
	John Conrad	" "	860	40 00
	Edw. Stalter	" "	861	20 00
	J. B. Parker	" "	862	13 50
	W. R. Beattie	1/10 sal. Sept. inst., 1897	863	54 17
	Maggie Zimmerman	Serv. as maid dept. dom. sec.	864	6 00
	Wash Townshend	1/10 salary Sept. inst., 1897	865	30 00
	W. F. Lavery	" "	866	70 00
	Wm. Whitestine	Salary for Sept., 1897	867	45 00
	Arthur Chantler	" "	868	45 00
	P. Cottingham	5 nights @ $1.50	869	7 50
	C. L. Wattering	Hauling brick	870	177 4

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Sept. 25	E. E. Harrold	$\frac{1}{10}$ salary Sept. inst, 1897	871	$70 00
	Chas. Stainrook	Enamel brick work	872	100 00
	E. N. Van Harlingen	$\frac{1}{10}$ salary Sept. inst., 1897	873	60 00
	H. McCullough	55 hrs. stone cutter @ 40c	874	22 00
	J. A. Frick	63½ "	875	25 40
26	Ed. Johnston	27 hrs. wk. on bldgs. @ 15c	876	6 65
	J. H. Brown	Services as watchman Sept. 6 to 30	877	37 50
	Orris Baker	16 hrs. bricklayer @ 45c	878	7 20
	Mike Masterson	18 hrs. work helping bricklayer @ 15c	879	2 70
18	W. Kneis	56½ hrs. bricklaying @ 45c	880	25 40
29	J. H. King	50½ " 15c	881	7 55
	Jos. Mosher	19¾ hrs. bricklayer @ 45c	882	8 90
	Harry McDowell	59½ "	883	26 75
	Wm. Sugreve	24 "	884	10 80
30	Dave Giroux	73½ hrs. bricklaying @ 45c	885	33 05
	Henry Williams	53 " labor @ 15c.	886	7 95
	Maggie Zimmerman	Services as maid dept. D. Sci	887	3 00
	Tom Hodge	57½ hrs. bricklaying @ 45c	888	25 85
Oct. 2	H. E. Kennedy, Supt	Pay roll laborers Towns Hall	889	1,428 65
	H. E. Kennedy, Supt	" Drill Hall	890	3,529 00
	H. E. Kennedy, Supt	" Biol. Hall	891	1,516 70
	F. W. Prentiss	Salary for Sept., 1897	892	33 33
	A. V. Bleininger	Account Scholarship in Ceramics	893	20 00
5	John Schumm	16 hrs. bricklaying @ 45c	894	7 20
	Chas. Paxton	27 " 15c	895	4 05
	Col. Supply Co	Pipe and fittings	896	13 76
7	R. W. Bock	12 board signs	897	12 00
	Blackwood, Green & Co.	1 dozen shovels	898	7 00
	John Cain	10 hrs. campus work @ 12½c	899	1 25
	E. E. Fisher	10 " "	900	1 25
	A. McClelland	15 " "	901	1 87
	F. C Kettler	10 " "	902	1 25
	T. W. Ditto	10 " "	903	1 25
	M. M. Gladding	15 " "	904	1 88
	F. S. Aten	25 " "	905	3 13
	E. S. Ream	35 " "	906	4 37
	R. S. Peters	10 " "	907	1 25
	Walter Marion	15 " "	908	1 87
	W. Gilmore	15 " "	909	1 87
	R. E. McIntosh	30 " "	910	3 75
	M. J. Harris	19½ " "	911	2 47
	C. H. Clevenger	25 " "	912	3 13
	W. D. Nichols	18 " "	913	2 25
	F. Rubins	10 " "	914	1 25
	H. Huff	240 " "	815	30 00
	W W. Wilken	144 " "	916	18 00
	J. H. Brown	11 " "	917	1 49
	J. A. Thompson	245½ " "	918	30 70
	A. Richards	169 " " 5c	919	8 45
	J. C. Britton	203 " " 15c	920	30 45
	H. H. Loomis	175¾ " " 12½c	921	21 97

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 7	S. Teter	200 hrs. camp work @ 12½	922	$25 00
	A. F. Wilcox	255 " " 15	923	38 25
	G. A. Flickinger	41½ " " 12½	924	5 19
	C. C. Hayden	47¾ " " "	925	5 97
	B. C. Sanders	123½ " " "	926	15 44
	C. K. McClelland	18½ " " "	927	2 31
	B. M. Pierce	70 " " "	928	8 75
	H. J. Hammond	85 " " "	929	10 63
	W. L. Kelly	80½ " " "	930	10 06
	J. G. Ridinger	110 " " "	931	13 75
	A. F. Courade	88 " " "	932	11 00
	W. H. Gilmore	105 " " "	933	13 12
	R. E. Whiting	24 " " "	934	3 00
	B. W. Hershey	45 " " "	935	5 62
	H. L. Belden	52¾ " " "	936	6 59
	J. C. Perry	58 " " "	937	7 25
	J. S. Parsons	28 " " "	938	3 50
	C. W. Breese	19 " " "	939	2 37
	E. C. Cotton	45 " " "	940	5 63
	Jay Palmer	61 " " "	941	7 63
	E. A. Falknor	33¼ " " "	942	4 15
	F. J. Tyler	40½ " " "	943	5 06
	C. Thornburg	74 " " "	944	9 25
	T. W. Brinker	20 " " "	945	2 50
	B. L. Gearing	9 " " "	946	1 13
	C. E. McCloy	Repairs on screw conveyor	947	50 00
	Tallmadge H'dware Co.	Hardware	948	27 04
	Blackwood, Green & Co.	Tin, galv. iron, etc	949	23 43
	Wm Cannon	21 hours brick laying @ 45c	950	13 95
	Frank Rhoads	19 " " "	951	8 55
	Wassall Fire Clay Co.	Paving brick	952	30 00
	A. F. Wilcox	25 hrs. wk. @ 15c. campus	953	3 75
	S. Teter	30 " " 12½c. "	954	3 75
	Hann & Adair	Paper, placards, etc	955	2 30
	Blackwood, Green & Co.	Oils, etc	956	30 31
	Francis Harris	Papering	957	13 61
	Babcock & Wilcox Co.	Expander, etc	958	49 00
	Col. Brass Co	Motor	959	31 00
	Acme Paving Co	Sand, etc	960	6 95
	Payne-McDonald Hd. Co	Oil, etc	961	44 37
	J. H. Randall	Carpenter work	962	31 75
	Stanley Elec. Mfg. Co.	2 static ground detectors	963	60 00
	J. J. Gheen	Plastering, kalsomining	964	275 70
	Borger Bros. & Co	Pipe, labor, etc	965	28 71
	Stitt, Price & Co	Cement and lime	966	8 90
	Blackwood, Green & Co.	Repairs on barn	967	14 80
	S. T. Hallsman	Painting farm house	968	20 32
	G. D. Cross Lumber Co.	Lumber	969	25 62
	B. H. Barton	42 hrs. carpenter wk. @ 25c	970	10 50
	C. H. Woodruff	Carpenter work	971	38 38
	J. C. Tyler	Welding chains	972	40
	Am. Dis. Teleg. Co.	Messenger service	973	1 75
	J. A. Thompson	20 hrs. wk. in conservatory	974	2 50
	Webb Sta and Ptg. Co.	Stationery	975	17 65
	McClelland & Co.	Pens, paper, etc	976	4 55

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 7	C. U. Telephone Co.	Telephone service	977	$81 34
	H. Brown Sons & Co.	Oils	978	5 20
	D. C. Beggs Co.	24 shades, hung	979	24 00
	Annis McLaughlin	66 hrs. wk. in executive office.	980	9 90
	R. J Seymour	163 hrs. as guide, etc	981	20 37
	F. R. West	35 " " @ 12½c	982	4 37
	S. Ramsey	Laundering towels	983	84
	F. A. Fish	9 hours work @ 15c	984	1 35
	B H. Flynn	25 " "	985	3 75
	W. U. Telegraph Co.	Messages	986	1 81
	Am. Dist. Telegraph Co.	Rent of five signal boxes	987	18 00
	Carter's Ink Co.	Typewriters, ribbons, etc	988	2 50
	Cher'ton Ptg. & Eng. Co	1 rubber stamp	989	50
	A. H. Smythe	½ dozen files	990	42
	C. O. Paper Co.	Paper, etc.	991	7 30
	Maggie Zimmerman	Service in Dep. Dom. Science, Sept. 30 to Oct. 7, 1897	992	3 00
	E. R. Eaton, Agent	Elevator	993	1,025 00
	H. Cole	2 boxes thumb tacks	994	1 10
	Schroth & Potter	Shades	995	28 50
	W. H. Anderson & Co.	1 set statutes	996	15 00
	Am. Dis. Telegraph Co.	Rent 7 fire alarm boxes	997	28 00
	B. F. Thomas	Money paid for 1 induction coil	998	142 15
	Chic. Lab. Sup & Scale Co	Balances, weights, etc	999	102 10
	W. H. Anderson & Co.	5 Bates' statutes	1000	75 00
	Z. L. White & Co.	Shades	1001	11 40
	H. Judd	11 hrs. wk. on tools @ 25c	1002	2 75
	H. Cole	1 roll blue print paper	1003	1 00
	Kelton & Converse	Lumber	1004	233 29
	E. E. Grahan	7 hours work @ 15c	1005	1 05
	J. H. Lesh	30 hours work @ 15c	1006	4 50
	T. J. Godfrey	Expense at meeting October 6, 7, 1897	1007	11 00
	Wm. Erdman	47 hours work on carpenter benches @ 17½c	1008	8 22
	J. H. Nold	74¼ hrs. w., carp bench's @ 15c	1009	11 15
	H. Chantler	59 hrs wk foundry floor @ 15c	1010	8 85
	L. C. Franks	54¼ " "	1011	8 15
	E. B. Glenn	30 hrs. wk. in forge shop @ 15c	1012	4 50
	O. C. Morris	59½ hrs. w. in carp. shop @ 25c	1013	14 87
	Geo. McKeog	46 " "	1014	11 50
	S. S. Freeman	Chemicals, etc	1015	4 79
	Champlin Ptg. Co.	500 cards	1016	2 00
	Tallmadge Haw. Co.	Hardware	1017	3 78
	Bissell, Dodge & E. Co	Conduits	1018	31
	Col. Transfer Co.	60 loads manure @ $1	1019	60 00
	Richards & Co.	Microscopes, etc	1020	164 06
	L. L. Williams	120 hrs. lib. wk. @ 12½c	1021	15 00
	F. C. Caldwell	Supervision elect. install	1022	75 00
	Landon Ptg & Pub. Co.	Circulars	1023	1 75
	Tracy-Wells Co.	1 copy book	1024	1 65
	C. W Burkett	200 1c., 200 2c. stamps	1025	7 00
	H. Cole	1 lens	1026	1 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 7	G. E. Stechert	Atlas of the Brain	1027	$4 00
	A. H. Smythe	2 color wheels, etc	1028	14 65
	Tallmadge Hdw. Co	Hardware	1029	12 78
	Cassell Pub. Co	1 book	1030	7 62
	A. C. Barrows	Cash paid for cases	1031	10 89
	H. Braun, Sons & Co	1 Trocar	1032	75
	A. B. Detchon	10 hours work @ 12½c, etc	1033	2 15
	E. M. Smith	135 hours work @ 15c	1034	20 55
	W. F. Sparhawk	1 mattress, towels, etc	1035	5 95
	W. Burdell, Jr	3 halters, 1 brush	1036	3 25
	Alexis Cope	Cash paid for work, as per receipt	1037	6 00
	Murphy Iron Works	Furnaces, balance due	1038	600 00
	Cap. City Mch. Works	Chisels, etc	1039	2 00
	Col. Supply Co	Fittings	1040	3 25
	R. Thomas & Sons Co	Bushings	1041	5 80
	Cent. Elect. Co	Canopies	1042	8 50
	Hann & Adair	2,000 time cards	1043	3 60
	Cent. Elect. Co	Switches, sockets, etc	1044	26 55
	C. H. Woodruff	Carpenter work, Drawing Department	1045	80 00
	Blackwood, Green & Co	1 copper print washer	1046	4 00
	Murray City Coal Co	Coal, smithing, 1 ton	1047	3 00
	E. A. Cole & Co	Coal del. September, 1897	1048	138 80
	E. F. Jenks	3 locks	1049	6 00
	Payne McD. Hdw. Co	Hardware	1050	13 38
	G. W. Clarke & Co	Lumber	1051	3 40
	Kelton & Brown	Cases and table	1052	210 00
	Kelton & Converse	Lumber	1053	11 78
	P. Nell	Labels	1054	2 51
	McClelland & Co	Paper, paste, etc	1055	13 45
	Hann & Adair	3,000 date slips, etc	1056	3 13
	D. S. Kellicott	Laboratory expenses	1057	5 85
	Bausch & Lomb Opt. Co.	1 micrometer	1058	2 67
	Spahr & Glenn	300 announcements	1059	8 50
	A. W. Jackson & Son	Books, binding	1060	9 00
	J. H. Randall	4 hours carp. wk. @ 25c	1061	1 00
	Tallmadge Hdw. Co	Hardware	1062	1 38
	J. H. Randall	4 hours carp. wk. @ 25c	1063	1 00
	C. H. Woodruff	Carpenter work	1064	27 08
	Burrows Bros Co	Cook books	1065	3 77
	L. S. Wells	Paper and hanging	1066	14 00
	C. T. Pfaff & Co	Table ware	1067	28 49
	Std. Sch. Furn. Co	1 black board	1068	9 35
	Krauss, Butler & B. Co.	Furnishings	1069	30 00
	Z. L. White	6 shades, etc	1070	3 96
	Col. Cabinet Co	4 special tables	1071	143 50
	C. O. Paper Co	Paper	1072	2 04
	Majestic Mfg. Co	1 range	1073	78 00
	Champlin Ptg. Co	500 cor. paper and env	1074	3 25
	Col. Supply Co.	Fittings	1075	16 92
	N. P. Oglesby	19 hrs. wk. store room @ 15c.	1076	2 85
	W. B. Calkins	90 " " "	1077	13 50
	Seraphim Bl'nk B'k Co.	Blank books	1078	6 50
	Kimball & Matthews	Supplies	1079	3 23

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 7	Blackwood, Green & Co	Hardware	1080	$22 43
	F. B. Mitchell	Hulling clover seed	1081	10 85
	Deering Harv. Co	Repairs, twine, etc	1082	25 43
	Lima Egg Case Co	100 doz. boxes, compound	1083	1 00
	E. W. Pegg	Cows	1084	356 37
	F. S. Johnston	122 hours as clerk @ 12½c	1085	15 25
	H. Braun, Sons & Co	4 thermometers	1086	3 00
	A. W. Livingston's Sons	3 bu. field peas, etc	1087	7 76
	Cap. City Mch. Wks	Work on motor materials	1088	5 67
	G. E. Stechert	Books	1089	24 00
	Burrows Bros. & Co	"	1090	64 70
	I. P. Frink	25 12-in. shades	1091	16 50
	F. F. Bonnet	1 clock	1092	6 00
	A. H. Smythe	2 fountain pens	1093	2 00
	J. H. Randall	5 hours carpenter work @ 25c	1094	1 25
	E. H Barton	4 " "	1095	1 00
	Gertrude Kellicott	2 pair scissors, etc	1096	60
	C. H Woodruff	Carpenter work	1097	28 50
	Nitschke Bros	Pencils, bands, etc	1098	2 70
	McClelland & Co	1 file	1099	35
	Boston Book Co	Index to vols. 1-85 Harper's magazine	1100	5 28
	Leucke & Buechner	1 book	1101	54
	F. J. Olsson	Harvard class	1102	8 68
	West Pub. Co	Books	1103	26 23
	R. R. Bowker	1 book	1104	2 00
	Tallmadge Hdw. Co	Hardware	1105	65
	Taylor-Austin Co	Books	1106	115 44
	Laning Ptg. Co	5159 sheets book paper	1107	123 35
	Lawrence Pub. Co	Zinc etching Towns. Hall	1108	5 25
	Beacon Light	Adv	1109	7 50
	Champlin Ptg. Co	Printing cards, etc	1110	198 60
	Hann & Adair	" envelopes, etc	1111	15 70
	Cols. Dispatch	Adv	1112	6 90
	Harper Ill. Syn	Adv. cuts	1113	2 10
	Nitschke Bros	Stationery, etc	1114	31 92
	O. T. Corson	Advertising	1115	22 50
	Weekly Law Bulletin	"	1116	30 00
	O. S. Journal Co	"	1117	3 60
	Jas. Stainbrook	25 days @ 1 50	1118	37 50
	Thos. Bonde	25 days @ $1.50 36 hours @ 15c	1119	42 90
	Marion Peck	25 days @ $1 50	1120	39 90
	J. Garrettson	24 days @ $1.50 helper	1121	36 00
	J. L. D. Nichols	15 days @ $1 50 asst. fireman	1122	22 50
	Henry Chantler	20 days @ $1.50 as janitor	1123	30 00
	J. S. Deeter	46 hours jan. work @ 15c	1124	6 90
	H. Gamper	80 " "	1125	12 00
8	Tallmadge Hdw. Co	Hardware	1126	1 03
	Hayden. Min. & Mfg Co	Brick and clay	1127	19 50
	B. D. Potts	Fittings, etc	1128	3 72
	T. A. Randall & Co	Adv. in clay worker	1129	20 00
	H. Cole	3 dozen coordinate	1130	45
	J. McAllister	11 days 2 hours @ 15c repairs Cer dept	1131	16 80

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 8	D. Singleton	34½ hrs. bricklay. Cer. Dept. @ 45c	1132	$15 53
	E. Orton, Jr	Cash paid work Ceramic Department	1133	13 00
	L. E Barringer	25¾ hrs. repairs Ceramic Department, @ 12½c	1134	3 21
	P. Hayden Hdw. Co	Grinding machine	1135	55 41
	N. B. Abbott	Grate bars	1136	11 60
	Imp Porcelain Wks	2 jars complete and balls	1137	15 00
	E. H. Barton	14 hours carp. work, @ 25c	1138	3 50
	C. H. Woodruff	Carp. work	1139	39 00
	Christy Fire Clay Co	Clay	1140	9 24
	F. Jennings	12 hours, @ 17½c. as paver	1141	2 10
	C. M. Ruhlen	17 " 15c	1142	2 55
	John Kane	155 " 12½c	1143	19 38
	P. R. Hord	20 "	1144	2 50
	J. F. Hale	15½ hours work @ 15c	1145	2 33
	F. S. Estep	13 "	1146	1 95
	M. Cook	155 " 12½c	1147	19 38
	E. H. Bailey	48½ " 15c	1148	7 28
	F. J. Tyler	14½ " 12½c	1149	1 81
	C. M. Sprague	16½ " 12½c	1150	2 06
	D. K. Starbuck	4 " 12½c	1151	50
	Col. Supply Co	Pipe and fittings	1152	77 74
	H. Cole	3 boxes lead	1153	45
	Col. Sewer Pipe Co	Sewer pipe.	1154	1 42
	T. J. Dundon & Co	Lumber	1155	38 30
	Cap. City Mach. Works	Rods, etc.	1156	6 74
	Tallmadge Hdw. Co	Hardware	1157	3 90
	Kilbourne-Jones Co	Bolts, washers, etc	1158	3 24
	Thompson & Bushnell	Repairing two indicators	1159	9 00
	C. J. Tagliabue	Instruments	1160	81 33
	C. J. Morrow	13½ hours work @ 12½	1161	1 69
	J. Massy	Calcimining museum & class-room	1162	15 00
	Dodge Mfg. Co	Hangers, etc	1163	24 55
	A. F. Hall	24 days work @ $2	1164	48 00
	Tallmadge Hdw. Co	Hardware	1165	3 11
	J. G. Biddle	1 galvanometer	1166	30 50
	McClelland & Co	Carbon paper	1167	50
	Schoedinger, Fearn & Co	Hardware	1168	63
	West'rn Elec. Inst. Co	1 Lab. voltmeter	1169	108 00
	J. H. Auld	Copper and crews	1170	3 38
	A. T. Kasley	3½ hrs. Elec. Lab. wrk @ 12½c	1171	44
	W. E. Chappell	64 " 15c	1172	9 60
	M. Barcus	43½ " 12½c	1173	5 44
	A. E Loeb	13½ " 17½c	1174	2 36
	E. G. Webster	5¾ " 12½c	1175	72
	Engelke & Bigelow	Freight and cartage	1176	51 70
	Kelton & Converse	Lumber	1177	18 20
	Bryson, Brubacker & Co	Insurance Arm. & B. Bldg	1178	147 00
	M. P. Streett	Mason work, etc	1179	226 55
	Col. Rubber & Belt Co	Pipes, etc	1180	30 27
	Cap. City Mach. Works	Pipes, castings, etc	1181	214 31
	Leavitt Mach. Works	Morse valve reseating outfit	1182	90 00

STATEMENT II- Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 8	New Col. Bridge Co.....	Bolts, etc.....	1183	$8 00
	D'Este & Seeley Co.....	Traps, etc.....	1184	182 00
	Col. Supply Co	Pipe and fittings	1185	60 77
	Bissell, Dodge & E. Co..	Elect. supplies	1186	141 26
	J. A. Spurrier.....	Electric plant work.....	1187	25 45
	W. E. Chappell.....	90 hours "	1188	13 50
	A. A. Loeb	160 " " @ 17½c.....	1189	28 00
	E. G. Webster	5 " " 12½	1190	63
	M. Barcus.....	66¼ " " 12½	1191	8 31
	A. T. Kas'ey.....	17 " "	1192	2 33
	O. A. Davis	192¼ " " @ 17½c.....	1193	33 83
	T. & O. C. Ry. Co	Freight.....	1194	22 46
	C. Weier	14½ hrs. brick layer @ 45c.....	1195	6 50
	Redett & Sons.....	Brick	1196	94 55
	J. F. Tulga	Making tools.....	1197	1 35
	C. E. Morris & Co...	Iron work.....	1198	59 55
	Orr, Brown & Price.....	Muriatic acid.....	1199	6 08
	C. O. Paper Co.....	Roofing and sheathing.....	1200	14 70
	Col. Supply Co.....	Sundries	1201	2 71
	P., C., C. & St. L. Ry Co.	Freight	1202	54 48
	C., S. & H. Ry. Co.....	Freight and car service	1203	860 62
	C., A. & C. Ry. Co.....	" "	1204	194 25
	Ind. Terra Cotta Co.....	Terra cotta.....	1205	1,182 25
	C., C., C. & St. L. Ry. Co.	Switching	1206	6 00
	Pedrick & Ferris.....	Mixed mortar	1207	533 87
	Climax Stone Co.....	Stone	1208	454 09
	J. C. Hearn & Co.....	Repairing	1209	29 05
	Lawrence Press Co.....	Office stationery	1210	6 80
	Kilbourne-Jones Co.....	Hardware	1211	747 69
	Schoedinger Fearn& Co	"	1212	30 42
	W. U. Telegraph Co.....	Telegrams	1213	15 18
	Jas. Tarbutt	Second hand lumber.....	1214	21 94
	New Lex Press Brick Co.	Press brick.....	1215	224 54
	Ruggles-Gale Co.....	Office stationery.....	1216	3 25
	Penn. Fuel Co.....	Lime, coal and hauling.....	1217	461 19
	C. Durner.....	Sharpening tools	1218	74 86
	Fultonham Brick Co.....	Common brick	1219	1,229 10
	F. Ward.....	Weighing lime and sand.....	1220	11 25
	Col. Brick & Terra C. Co	Press brick.....	1221	148 29
	C., H., V. & T. Ry. Co...	Freight	1222	19 71
	Warthorst & Co	Press brick.....	1223	1,177 95
	R. A. McClure.....	Mill work	1224	250 00
	White & Pixley.	Elect work.....	1225	200 00
	Champion Iron Co.....	Ornamental and structural iron	1226	3,000 00
	J. W. Coulson & Co.....	Painting and glazing	1227	300 00
	C. H. Lyon	Bolts and rods.....	1228	131 63
	Adam Wagner.....	Elevator	1229	58 00
	C. U. Telephone Co.....	Service.....	1230	16 50
	Buckeye Brick Co.....	Press brick.....	1231	2,383 13
	Standard Oil Co.....	Oils.....	1232	6 93
	L. Schreiber Sons Co....	Iron.....	1233	3,500 00
	Fitzpatrick & Hoepfner	Plumbing, heating and ventilating	1234	1,000 00
	Wm. Caldwell	Lumber..	1235	1,099 63

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Oct. 8	Taylor, Beall & Co.	Stone	1236	$355 00
	Saunders & Esswein	Plumbing, heating, etc.	1237	200 00
	Col. Bolt Works	Bolts, rods, etc	1238	16 96
	Engelke & Bigelow	Freight and hauling	1239	549 18
	T. J. Dundon & Co.	Lumber	1240	2,441 22
	H. E. Kennedy, Supt	Expressage	1241	25
	W. U. Telegraph Co.	Telegrams	1242	1 10
	Ruggles-Gale Co.	Stationery	1243	90
	T. J. Dundon & Co.	Lumber	1244	2 98
	Jas. Larrison	50 hours bricklaying helper @ 15c	1245	7 50
	Melville Morice	46½ hours @ 17½c. bricklayer's labor	1246	8 15
	Jack Strain	54 hrs. bricklaying @ 15c	1247	8 10
	J. T. Mack	Exp. meeting Oct. 6, 1897	1248	11 65
9	E. Baker	24 hrs. as bricklayer @ 45c	1249	10 80
	C. Robinson	55½ hrs. helper " 15c	1250	9 70
	C. L. Wattering	Hauling brick	1251	161 83
	H. E. Kennedy, Supt	Salary as Supt. Sept., 1894	1252	350 00
	Chas. Stainrook	Laying enamel brick	1253	374 00
	O. A. Davis	⅙ salary Sept. inst., 1897	1254	10 00
	C. Riddle	" "	1255	20 00
	W. E. Chappel	" "	1256	10 00
11	Alfred Butcher	21½ hours brick layer's helper @ 15c	1257	3 20
12	Mrs. J. F. Worcester	12 meals, board of trustees Aug. 4, and Sept. 10	1258	4 20
	J. McLain Smith	Expenses at meeting October 6, 1897	1259	7 70
13	F. M. Senter P. M	Stamps, 100-5c., 300-3c, 700-2c. 700-1c., 500 postals	1260	40 00
14	F. W. Prentiss	B-E. to order of C. Kob & Co.	1261	850 61
	W. M. Williams	23 hrs. bricklaying @ 45c	1262	10 35
	Chas. Reeb	33 hrs. bricklaying @ 45c	1263	14 85
	Maggie Zimmerman	Serv. maid Domestic Science Department	1264	4 50
16	H. E. Kennedy, Supt	Pay roll Armory	1265	3,425 35
	H. E. Kennedy, Supt	" Biol. Bldg	1266	421 40
	H. E. Kennedy, Supt	" Towns. Hall	1267	1,744 40
	Col. Gas Co.	Gas for Sept., 1897	1268	62 25
	W. I. Chamberlain	Exp. at meeting Oct. 6, 1897	1269	12 50
	F. M. Senter, P. M.	100-2c. stamped envelopes	1270	21 80
18	I. Corvead	22 hours @ 15c. brick work	1271	3 30
	Chas. Mullis	18 hours work @ 15c	1272	2 70
19	Tom Hays	16 hours brick work @ 35c	1273	5 60
20	Col. Water Works	Water rents and charges	1274	208 96
21	Maggie Zimmerman	Serv. 1 wk. Dept. Dom. Science	1275	3 00
22	Eimer & Amend	Instruments	1276	227 08
	F. Kelley	46 hours work @ 17½	1277	8 05
23	Chas Keller	56 hours bricklaying @ 45c	1278	25 20
	H. Watheischwang	56 " "	1279	25 20
	L. Frost	56 " "	1280	25 20
	C. L. Wattering	Hauling brick	1281	52 08
	John Brothe	60 hrs. stone cutting @ 40c	1282	24 00
	J. Shaw	60 " "	1283	24 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Total.
1897.				
Oct. 23	W. Shaw	60 hrs. stone cutting @ 40c.	1284	$24 00
	H. Maddocks	64 " "	1285	25 60
	F. Frelevane	64 " "	1286	25 60
	John King	64 " "	1287	25 60
	Philip Schell	64 " "	1288	25 60
	Adam S. Tencker	64 " "	1289	25 60
	J. R. Abernathy	64 " "	1290	25 60
	Joe Leibold	64 " "	1291	25 60
25	E. T. Garner	Brick wk., Drill Hall	1292	14 80
	E. Jackson	63 hrs. brick wk. @ 17½c.	1293	11 00
	A. Maier	61½ " carp " 25c.	1294	15 35
	E. R. Eaton, Agt	Elevator as per contract	1295	1,025 00
	Wm. Geisel	30 hrs. wk. @ 11½c., Drill Hall	1296	3 35
	Wm. Hewitt	Carp. wk., Towns. Hall	1297	12 15
26	C. W. Rice	" 81 hrs. @ 25c.	1298	20 25
27	Westinghouse E. Co.	Converters, etc	1299	529 00
30	H. A. Weber	⅙ sal., Oct inst., 1897	1300	225 00
	A. M. Bleile	" "	1301	225 00
	W. A. Kellerman	" "	1302	225 00
	C. N. Brown	" "	1303	225 00
	A. C. Barrows	" "	1304	225 00
	Edw. Orton	" "	1305	225 00
	E. A. Eggers	" "	1306	225 00
	J. R. Smith	" "	1307	225 00
	G. W. Kn gh	" "	1308	225 00
	W. R. Lazenby	" "	1309	225 00
	S. C. Derby	" "	1310	225 00
	R. D. Bohannan	" "	1311	225 00
	W. T. Magruder	" "	1312	225 00
	J. P. Gordy	" "	1313	225 00
	W. H. Scott	" "	1314	225 00
	B. F. Thomas	" "	1315	225 00
	J. V. Denney	" "	1316	225 00
	B. L. Bowen	" "	1317	225 00
	D. S. Kellicott	" "	1318	225 00
	A. L. Williston	" "	1319	225 00
	N. W. Lord	" "	1320	200 00
	G. W. Kauffman	" "	1321	200 00
	Wm. McPherson	" "	1322	200 00
	F. A. Ray	" "	1323	200 00
	Edw. Orton, Jr.	" "	1324	180 00
	J. N. Bradford	" "	1325	180 00
	G. W. McCoard	" "	1326	160 00
	H. C. Lord	" "	1327	150 00
	E. A. Hitchcock	" "	1328	150 00
	W. D. Gibbs	" "	1329	140 00
	P. G. Bowman	" "	1330	140 00
	F. C. Caldwell	" "	1331	140 00
	D. S. White	" "	1332	140 00
	S. A. Norton	" "	1333	120 00
	R. I. Fulton	" "	1334	120 00
	O. B. Jones	" "	1335	120 00
	J. E. Boyd	" "	1336	110 00
	C. E. Sherman	" "	1337	100 00
	T. E. French	" "	1338	100 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 3	C. O. Paper Co	Book paper	1447	$19 00
	R. J. West	81 hours guide work	1448	10 12
	Mitchell Adv. Co	Depot time card 3 mo	1449	1 00
	Alexis Cope	Expenses to Circleville, Page wi	1450	3 00
	R. J. Seymour	60 hours guide work	1451	7 50
	Blackwood Green Co	Tin	1452	1 69
	O. A. Davis	161½ hours plant work @ 17½c	1453	28 26
	Champlin Ptg. Co	Letter heads, etc	1454	6 00
	S. V. Peppel	Asst. Dept. Chemistry	1455	6 60
	Z. L. White & Co	Table linen, etc	1456	26 51
	Spahr & Glenn	Stationery	1457	7 25
	C. C Fergus	22 hours work at 15c	1458	3 30
	W. K. Moorehead	Work in Museum	1459	56 80
	H. Cole & Co.	1 protractor	1460	9 00
	Jas. Stainbrook	26 days @ $1.50	1461	39 00
	E. T Fullmer	66 hours work @ 15c	1462	9 90
	Murray City Coal Co	Coal	1463	264 78
	E. A. Cole & Co	"	1464	3 11
	D. S. White	Instruments	1465	1 25
	H. J. Detmers	1 set spraying instruments	1466	25 00
	D. C. Beggs & Co	4 shades made and hung	1467	3 60
	Wm. Burdell	2 stable blankets	1468	4 50
	H Braun Sons & Co	Thermometers, oil, etc	1469	19 01
	J. M. & W. Westwater	1½ com. pdt. burner	1470	5 00
	Andrew Earl	Lumber	1471	5 50
	J. H. Randall	1½ hours carpenter wk @ 25c	1472	1 87
	E. H. Barton	5 " "	1473	1 25
	Col. Paint Mfg. Co	Paint	1474	60
	J. B. Colt & Co	1 elec. lamp	1475	11 25
	Ruggles-Gale Co	Paper, etc	1476	13 00
	Frankenberg Bros	200 trays	1477	1 50
	D. Mason	Varnishing case	1478	3 00
	J. G. Biddle	Instruments, etc	1479	42 50
	Chic. Lab. Sup. & S. Co	"	1480	79 38
4	Landon Ptg. & Pub. Co	Letter heads, env etc	1481	11 75
	Wm. Shaw	37 hours brick work @ 45c Arm	1482	16 65
	Bernize & Jones	1 steel share, etc	1483	3 80
	Hann & Adair	Paper and pens	1484	2 30
	Benj. Rushmer	Horse shoeing, etc	1485	34 55
	J. A. Wallace	1 lecture, etc	1486	10 00
	F. S. Johnson	108 hours clerc. ast. @ 12½c	1487	13 50
	Bissell, Dodge & E. Co	Wire braids	1488	6 27
	Cap. City Mch. Wks	Iron	1489	52
	Am. Battery Co	Battery cells	1490	29 35
	J. G. Biddle	1 voltmeter	1491	71 76
	R. T. Stewart	1 bird for museum	1492	5 00
	H. Braun Sons & Co	1 dozen dissecting boxes	1493	3 65
	Hann & Adair	Slips and blank cards	1494	1 50
	L. S. Wells	Books	1495	20 00
	Nitschke Bros	00 certificates	1496	3 00
	Harper Ill. Syn	Adv. cuts	1497	10 35
	O. S. Journal Co	Adv	1498	7 45
	Press-Post Ptg. Co	Adv	1499	8 06

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 4	Landon Ptg. & Pub. Co.	Ptg. slips, etc	1500	$35 00
	C. H. Woodruff	Carp. wk	1501	4 80
	Houghton, Mifflin & Co.	1 book	1502	1 20
	Spahr & Glenn	Letter heads, env., etc	1503	9 25
	The McMillan Co	1 Lafange Ptg	1504	1 04
	Chas. Scribner's Sons	1 Meredith Essay on Comedy.	1505	1 00
	Harper & Bros	Books	1506	1 54
	D. Appleton & Co	Armsdales Lang. Arts	1507	79
	G. E. Stechert	Books	1508	24 00
	Engelke & Bigelow	Frt. and cartage on guns	1509	4 64
	Nitschke Bros	Letter heads, etc	1510	10 75
	F. Kull	25 hrs. stone wk. @ 40c	1511	10 00
	C. Alberts	"	1512	10 00
	John Troit	" 45c	1513	10 00
	J. T. Martin	Cash adv. in paym't bills	1514	2 00
	Gen'l Elect. Co	1 battery	1515	4 20
	Tallmadge Hdw. Co	Hardware	1516	1 70
	Cap. City Mch. Wks	5 lbs. grease	1517	60
	Cherington P. & E. Co.	1 pad, etc	1518	2 50
	Kilbourne-Jones Co	Copper wire, etc	1519	4 74
	Cent. Elec. Co	Battery jars	1520	4 48
	E. H. Barton	4 hrs. carp. wk. @ 25c	1521	1 00
	J. H. Randall	5 "	1522	1 25
	Kimball & Matthews	Photo supplies	1523	1 95
	W. J. Corns	Ptg., varnishing, etc	1524	41 00
	J. Rath	Cleaning furn., etc., repairing	1525	15 00
	Manhattan Concrete Co	Slating, blackboard	1526	33 50
	I. Rumley	27 hrs. brick wk. @ 15c	1527	4 05
	Geo. Sayers	25 hrs. stone wk. @ 30c	1528	7 50
	Hanna Paint Mfg. Co	Paints and oils	1529	2 45
	Borger Bros. & Co	Repairs on boiler, etc	1530	15 40
	Griswold Sohl Co	Iron	1531	1 03
	Col. Brass Co	3 rubbers	1532	60
	Murphy Iron Wks	Plate slides, etc	1533	4 10
	Westinghouse Elec. Co.	1 marble slab, etc	1534	9 28
	Blackwood, Green & Co.	Charcoal, etc	1535	2 95
	B. D. Potts	Pipe, etc	1536	2 19
	J. R. Spurrier	10½ hrs. Elect. plant wk. @ 20c	1537	2 10
	E. G. Webster	88¼ hrs. Plant wk. @ 12½c	1538	11 03
	F. Estep	23 " 15c	1539	3 45
	F. D. Price	25 " 12½c	1540	3 12
	K. D. Starbuck	45 " 10c	1541	4 50
	A. G. Fritchey	5 gals. gasoline	1542	50
	Joe Garretson	26 days @ $1.50	1543	39 00
	J. J. Gheen	Kalsomining Room No. 42	1544	4 40
	Talmadge Hdw. Co	Hardware	1545	15
	D. Mason	8 hrs. wk. @ 25c	1546	2 00
	E. H. Barton	17½ hrs. carp. wk. @ 25c	1547	4 37
	The Globe Co	1 card index cabinet	1548	22 50
	Library Bureau	Library supplies	1549	13 96
	J. M. & W. Westwater	1 Elect. portable	1550	4 00
	McAllister Mohler & Co.	1 daily report file, etc	1551	27 30
	A. Earl	Lumber	1552	5 83

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 4	C. H. Woodruff	12¼ hrs. carp. wk. @ 27½c	1553	$3 47
	J. H. Randall	28 " 25c	1554	7 00
	McClelland & Co	1 desk basket	1555	1 00
	Burrows & Bros. Co	Books	1556	30 78
	"Our Day" Co	Subscription from Feb., 1895, to Oct., 1897	1557	5 35
	G. E. Stechert	Books	1558	76 30
	Seraphim Bindery	Bookbinding	1559	54 80
	Champlin Ptg. Co	Vouchers, etc	1560	13 00
	G. B. Schulte Sons Co	Hardware, tools, etc	1561	128 67
	H. Graham	20 hours work @ 15c	1562	3 00
	E. H. Bailey	40 hours shop work @ 40c	1563	6 00
	Wm. Erdman	61½ " 17½c	1564	10 75
	J. H. Nold	103 " 15c	1565	15 45
	C. W. High	11 " "	1566	1 65
	Leland & F. Mfg. Co	1 grinding machine	1567	25 00
	E. A. Kinsey Co	Shafting, etc	1568	43 44
	Z. L. White & Co	1 door mat, shades	1569	3 85
	Kelton & Converse	Lumber	1570	29 02
	Fish Press Brick Co	Brick	1571	13 00
	Stitt, Price & Co	2 barrels fire clay	1572	3 00
	H. Gamper	1/10 salary jan., Oct., 1897	1573	10 00
	Shilling Foundry Co	Sand and drayage	1574	16 25
	Tallmadge Hdw. Co	Hardware	1575	16 45
	Hanna Pt. Mfg. Co	Orange shellac	1576	7 70
	The Q. & Co	2 dozen sharp saw blades	1577	2 50
	Henry White	20 hrs. brick work @ 15c	1578	3 00
	Kauffman-Lattimer Co	Drugs and chemicals	1579	1,065 06
	W. B. Calkins	104 hours work @ 15c	1580	15 60
	N. P. Oglesby	50 "	1581	7 50
	C. H. Woodruff	Amount due for the making of racks	1582	9 00
	Kimball & Mathews	Jars	1583	7 85
	Baker & Co	Platinum ware	1584	108 87
	Queen & Co	Balances, etc	1585	84 00
	Green, Joyce & Co	6 dozen towels	1586	7 50
	J. Carbutt	Plates, etc	1587	45 41
	Rochester Opt. Co	1 rubber tray, etc	1588	8 32
	Hann & Adair	Letter heads, slips, etc	1589	10 00
	Blackwood, Green & Co	Hardware	1590	18 00
	C. L. Wattering	Hauling brick	1591	79 20
	C. J. Morrow	45 hours work @ 12½c	1592	5 63
	C. M. Ruhlen	18 " 15c	1593	2 70
	H. Chantler	57 " 15c	1594	8 55
	A. F. Hall	1 month labor Mechanical Engeering Department	1595	60 00
	John Kane	80 hours work @ 12½c	1596	10 00
	R. R. Hord	10 "	1597	1 25
	E. H. Bailey	50 " 15c	1598	7 50
	M. Cook	77 " 12½c	1599	9 63
	F. J. Hale	27 " 15c	1600	4 05
	Longshore & Mackey	Hauling	1601	50
	Ashcroft Mfg. Co	Repairs on apparatus	1602	20 50
	Tallmadge Hdw Co	Hardware	1603	56
	McClelland & Co	2 dozen neostyle paper	1604	1 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 4	Schoedinger, Fearn&Co	Hardware	1605	$3 40
	Bissell, Dodge & E. Co.	2 sets zinc type, etc...	1606	1 96
	Nitschke Bros.	Stationery	1607	24 45
	Borger Bros. & Co.	1 steel stand pipe	1608	60 00
	Kelton & Converse	Lumber	1609	6 96
	Acme Paving Co.	Plastering cistern	1610	74 50
	T. J. Dundon & Co.	Lumber	1611	1 12
	L. S. Starrett.	Indicators, etc	1612	16 31
	Col. Supply Co.	Pipe and fittings	1613	42 21
	A. W. Livingston's Sons	Seeds	1614	1 45
	M. J. Morrow	10 hours work @ 12½c	1615	1 25
	F. S. Aten	20 "	1616	2 50
	Col. Macadam Co.	Crushed stone	1617	177 88
	B. J. Nicola	20 hours camp work @ 12½c	1618	2 50
	R. S. Peters	20 " "	1619	2 50
	T. W. Ditto	15 " "	1620	1 88
	J. Cain	15 " "	1621	1 88
	E. A. Falknor	36 " "	1622	4 50
	W. L. Kelley	Work on grounds	1623	8 07
	A. C. Colton	"	1624	9 51
	A. H. Snyder	"	1625	6 76
	B. Saunders	"	1626	6 63
	J. S. Parsons	"	1627	4 26
	J. G. Ridinger	"	1628	6 57
	A. F. Wilcox	"	1629	35 40
	J. C. Perry	"	1630	11 94
	E. E. Fisher	"	1631	8 45
	E. S. Ream	"	1632	9 69
	J. A. Thompson	"	1633	25 06
	A. D. Mason	"	1634	3 75
	J. M. Breese	"	1635	3 38
	H. L. Belden	"	1636	10 38
	B. W. Hershey	"	1637	9 57
	H. J. Hammond	"	1638	3 69
	J. Palmer	"	1639	9 00
	Bissell, Dodge & E. Co.	Elect. supplies	1640	19 38
	Shoedinger, Fearn & Co	Hardware	1641	5 40
	A. T. Kasley	22¾ hours work @ 12½c	1642	2 84
	C. H. Clevenger	Work on grounds	1643	7 75
	Elect. Appliance Co.	Elect. supplies	1644	45 29
	C. E. Lee	Elect. lab. work	1645	3 95
	A. E. Loeb	"	1646	11 11
	J. C. Britton	Work on grounds	1647	12 98
	W. E. Chappell	Elect. lab. work	1648	8 87
	A. H. McIntyre	Elect. plant	1649	2 55
	J. H. Randall	Carp. work	1650	32 38
	Col. Edison E. Light Co	Volt lamps, etc.	1651	80 00
6	S. H. Sattershwarth	Brick work, Armory	1652	7 20
	Yost & Packard	Service as archts., Armory	1653	600 00
	Yost & Packard	Service as archts., Biol. Hall	1654	400 00
4	C. H. Woodruff	Carp. work	1655	78 30
	C. Thornburg	Work on grounds	1656	10 00
	E. H. Barton	Carp. work	1657	35 75
	Tallmadge Hdw. Co.	Hardware	1658	13 73

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 5	Maggie Zimmerman	Service 1 week, Department Dom. Science	1659	$3 00
	G. E. Stechert	Books	1660	30 91
	A. F. Conradi	Work on grounds	1661	6 26
	R. E. Whiting	"	1662	5 69
	Engelke & Bigelow	Freight and hauling	1663	61 01
	Kelton & Converse	Lumber	1664	27 16
	Walter Gilmore	Work on grounds	1665	4 94
	H. Huff	"	1666	6 87
	Col. Rubber & Beltg. Co	Fittings	1667	65 82
	Col. Supply Co.	Pipe and fittings	1668	43 72
	Thos. Bonde	Work as fireman	1669	58 20
	Cap. City Mch. Works	Brackets, etc.	1670	47 56
	W. J. Marion	Work on grounds	1671	3 69
	J. W. Brinker	"	1672	3 75
	F. C. Kettler	"	1673	4 94
	S. Teter	"	1674	4 94
	A. Earl	Lumber	1675	20 88
	F. Rubins	Work on grounds	1676	4 87
	D. W. Galehouse	"	1677	3 38
	M. Peck	26½ days work @ $1.50	1678	41 25
	H. Chantler	8½ " "	1679	12 75
	R. Case	19 " "	1680	28 50
	Schoedinger F & Co	Towns. Hall equipt	1681	96
	Acme Paving Co	" "	1682	3 42
	Hayden Sad. Hdw. Co	Hardware	1683	1 43
	Fish Stone Co	Stone	1684	12 29
	C. O. Paper Co	Lining for refrigerator	1685	37 40
	F. O. Schoedinger	Galv. iron box, etc.	1686	7 80
	W. U. Telegraph Co	Service, messages	1687	7 31
	C. Durner	Sharpening tools	1688	36 98
	Pedrick & Ferris	Mortar	1689	451 76
	F. Ward	Weighing lime and sand	1690	14 25
	F. O. Schoedinger	Tile roof, etc	1691	1,506 72
	Ind. Terra Cotta Co	Terra cotta	1692	92 90
	Champion Iron Co	Structural and orn. iron	1693	500 00
	R. A. McClure	Mill work	1694	450 00
	White & Pixley	Elect. work	1695	125 00
	L. Schreiber Sons Co	Structural iron	1696	5,500 00
	Chas. Wuichet Co	Galvanized iron and roofing	1697	3,000 00
	J. W. Coulson & Co	Painting and glazing	1698	600 00
	Saunders & Esswein	Plumbing, heating, etc	1699	2,000 00
	W Caldwell	Mill work and lumber	1700	3,629 08
	Gilsonite Roof & Pav. Co	Roofing	1701	1,000 00
	W. U. Terra Cotta Co	Terra cotta	1702	300 00
	Mrs. A. M. Winstanley	Stone	1703	235 87
	C. S. & H. Ry. Co	Freight and switching	1704	767 04
	Redett & Sons	Press brick	1705	4 00
	Buckeye Brick Co	"	1706	1,952 42
	Homegardner Sand Co	Sand	1707	57 48
	Warthorst & Co	Press brick	1708	1,354 09
	Fultonham Brick Co	Common brick	1709	1,046 92
	Climax Stone Co	Stone	1710	119 54
	Kilbourne-Jones Co	Hardware, etc	1711	1,666 18
	C. E. Morris & Co.	Iron	1712	50 59

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 5	Schoedinger. F. & Co....	Hardware	1713	$97 48
	Taylor, Beall & Co.....	Stone	1714	72 00
	Standard Oil Co.....	Engine oil	1715	1 05
	Penna. Fuel Co	Lime, etc...	1716	256 03
	Engelke & Bigelow.....	Freight and hauling...	1717	191 19
	Fish Stone Co..... ...	Stone coping	1718	14 49
	Col. Supply Co..	Sundries	1719	1 22
	Am. Enam. Brick & T. Co	Enamel brick	1720	332 81
	Orr, Brown & Price.....	Muriatic acid	1721	3 57
	Lawrence Press Co.....	Stationery	1722	8 35
	C., A. & C. Ry. Co.....	Freight	1723	118 91
	P., C., C. & St. L. Ry. Co.	"	1724	24 51
	Derwacter & Hall.....	Iron for sheathing..	1725	2 50
	C., C., C. & St. L. Ry. Co.	Freight and switching	1726	100 71
	Tracy-Wells Co.....	Marbles	1727	4 65
	C. U. Telephone Co.....	Service	1728	2 45
	Ruggles-Gale Co.....	Office stationery	1729	4 00
	K. Nurian..	1/10 salary October installment	1730	10 00
	E. E. Somermeier.....	2/10 sal., Sept. & Oct. inst., 1897	1731	20 00
6	R. L. Miles..... ..	24 hrs. bricklaying @ 45c.....	1732	10 80
8	G. Neth.....	66 hrs. carp. work @ 30c.....	1733	19 80
	John Bramsburg.....	18 " " @ 25c.....	1734	4 50
9	T. J. Dundon & Co.....	Lumber	1735	626 71
	W. A. Morley.....	Brick work	1736	4 25
	D. V. Bartlett.....	"	1737	4 50
	S. Long..	59 hours @ 11½c..	1738	6 55
	Peters, Burns & Pretzinger.....	Account services architects, Towns. Hall.....	1739	700 00
10	Col Gas. Co.....	Gas for October, 1897	1740	117 38
	H. E. Kennedy	Services as supt. buildings.....	1741	361 80
	T. J. Dundon & Co.....	Lumber, Towns. Hall	1742	400 00
11	Maggie Zimmerman	Serv. 1 wk. Dep. Dom. Sci ...	1743	3 00
13	H. E. Kennedy, Supt.....	Pay roll, Arm. and Gym.....	1744	2,201 45
	H. E. Kennedy, Supt...	" Biol. Hall.....	1745	218 85
	H. E. Kennedy, Supt.....	" Towns. Hall.....	1746	1,190 65
	F. M. Senter.....	3,000 stamped envelopes.....	1747	66 48
	J. Schafer.....	4 hrs. bricklaying @ 45	1748	1 80
15	E. T. Watson.....	½ mo. salary, November 1 to November 15, 1897.....	1749	10 00
	J. T. Martin	Pay U. S. for ord. stores destroyed.....	1750	6 97
17	A. A. Griffing Iron Co...	1 2 sec. Elite radiator	1751	1 98
27	T. F. Hunt	1/10 salary, November inst., 1897	1752	250 00
	H. A. Weber.....	" " "	1753	225 00
	A. M. Bleile...	" " "	1754	225 00
	W. A. Kellerman..	" " "	1755	225 00
	C. N. Brown.....	" " "	1756	225 00
	A. C. Barrows	" " "	1757	225 00
	Edw. Orton.....	" " "	1758	225 00
	E. A. Eggers.....	" " "	1759	225 00
	J. R. Smith	" " "	1760	225 00
	Geo. W. Knight.....	" " "	1761	225 00
	W. R. Lazenby.....	" " "	1762	225 00
	S. C. Derby.....	" " "	1763	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Total.
1897.				
Nov. 27	R. D. Bohannon	1/6 sal., Nov. inst., 1897	1764	$225 00
	W. T. Magruder	" "	1765	225 00
	J. P. Gordy	" "	1766	225 00
	W. H. Scott	" "	1767	225 00
	B. F. Thomas	" "	1768	225 00
	J. V. Denney	" "	1769	225 00
	B. L. Bowen	" "	1770	225 00
	D. S. Kellicott	" "	1771	225 00
	A. L. Williston	" "	1772	225 00
	N. W. Lord	" "	1773	200 00
	G. B. Kauffman	" "	1774	200 00
	Wm. McPherson	" "	1775	200 00
	F. A. Ray	" "	1776	200 00
	Edw. Orton, Jr.	" "	1777	180 00
	J. N. Bradford	" "	1778	180 00
	G. W. McCoard	" "	1779	160 00
	H. C. Lord	" "	1780	150 00
	E. A. Hitchcock	" "	1781	150 00
	W. D. Gibbs	" "	1782	140 00
	Perla G. Bowman	" "	1783	140 00
	F. C. Caldwell	" "	1784	140 00
	D. S. White	" "	1785	140 00
	S. A. Norton	" "	1786	120 00
	R. F. [illegible]	" "	1787	120 00
	J. E. Boyd	" "	1788	110 00
	C. E. Sherman	" "	1789	100 00
	T. E. French	" "	1790	100 00
	C. W. Mesloh	" "	1791	100 00
	F. C. Clark	" "	1792	100 00
	W. H. Siebert	" "	1793	100 00
	A. W. Hodgman	" "	1794	100 00
	J. R. Taylor	" "	1795	100 00
	J. A. Bownocker	" "	1796	90 00
	W. A. Knight	" "	1797	90 00
	C. W. Weick	" "	1798	90 00
	C. C. Sleffel	" "	1799	90 00
	C. W. Foulk	" "	1800	85 00
	C. L. Arnold	" "	1801	85 00
	K. D. Swartzel	" "	1802	85 00
	C. A. Dye	" "	1803	85 00
	J. S. Hine	" "	1804	85 00
	J. H. Schaffner	" "	1805	80 00
	Clark Wissler	" "	1806	80 00
	W. L. Graves	" "	1807	80 00
	C. A. Bruce	" "	1808	80 00
	C. W. Burkett	" "	1809	75 00
	W. F. Lavery	" "	1810	70 00
	F. Haas	" "	1811	70 00
	A. E. Vinson	" "	1812	65 00
	F. L. Landacre	" "	1813	65 00
	T. K. Lewis	" "	1814	60 00
	E. M. VanHarlingen	" "	1815	60 00
	E. E. Harrold	" "	1816	70 00
	Harriet Townshend	" "	1817	55 00
	F. E. Kester	" "	1818	55 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpcse.	No.	Amount.
1887.				
Nov. 27	Maude Jeffrey	1/10 salary Nov. inst., 1897	1819	$50 00
	Gertrude Kellicott	" "	1820	50 00
	W H. Evans.	" "	1821	40 00
	J. T Martin..	" "	1822	40 00
	J. R. Spurrier	" "	1823	35 00
	H. W. Kuhn	" "	1824	30 00
	H. Judd	" "	1825	30 00
	J. H. Fox	" "	1826	30 00
	C. T. Morris..	Nov. inst. Mc. M. Fellowship..	1827	30 00
	J. F. Cunningham	1/10 salary Nov. inst., 1897	1828	30 00
	J. G. Boyd	" "	1829	25 00
	C. B. Fredericks	" "	1830	25 00
	Robt. Fisher	" "	1831	20 00
	C. Kiddle	" "	1832	20 00
	O. A. Davis	" "	1833	10 00
	W. E. Chappell	" "	1834	10 00
	H. Gamper	" "	1835	10 00
	K. Nurian	" "	1836	10 00
	E. E. Somermeir	" "	1837	10 00
	W. Hunter	" "	1838	250 00
	W. H. Page	" "	1839	100 00
	E. B. Kinkead	" "	1840	100 00
	D. F. Pugh	" "	1841	70 00
	E. O. Randall	" "	1842	65 00
	J. P. Jones	" "	1843	35 00
	G. W. Knight	" "	1844	25 00
	F. F. D. Albery	" "	1845	15 00
	J. H. Collins	" "	1846	10 00
	J. H. Canfield	Salary for Nov., 1897	1847	500 00
	Alexis Cope	" "	1848	187 50
	W. C. McCracken	" "	1849	125 00
	G. R. Rose	" "	1850	65 00
	Edith Cockins	" "	1851	54 17
	Chas. Low	" "	1852	54 17
	W. R. Beattie	" "	1853	54 17
	Jean Blackford	" "	1854	50 00
	C. B. Hine	" "	1855	50 00
	Mary H. Cope	" "	1856	50 00
	Wm. Standley	" "	1857	45 00
	Benj. LeBay	" "	1858	45 00
	Arthur Chantler	" "	1859	45 00
	J. H. Brown	" "	1860	45 00
	Wm. Whitestine	" "	1861	45 00
	Jas Kelley	" "	1862	41 67
	F. B. Brewer	" "	1863	40 00
	John E. Adams	" "	1864	40 00
	John Conrad	" "	1865	40 00
	F. W. Prentiss	" "	1866	33 33
	W. Townshend	" "	1867	30 00
	Clarence Loveberry	" "	1868	25 00
	Edw. Stalter	" "	1869	20 00
	J B. Parker	" "	1870	13 50
18	Maggie Zimmerman	1 week's services Dep. Dom. Sci	1871	3 00
27	M. Dresback	1/10 salary Nov. inst., 1897	1872	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Nov. 18	C. U. Telephone Co.....	Telephone service	1873	$1 20
20	J. W. Coulson & Co.....	Painting and glazing	1874	300 00
	C. L. Wattering	Hauling brick..	1875	30 90
22	W. C. Huff	41 hrs. brick work @ 15c	1876	6 15
	A. Sterner	18 hrs. carp. work @ 25c.....	1877	4 50
	Nick Wagner.....	55½ hrs. brick work @ 45c.....	1878	24 85
	A. H. Faulkner.....	72 " "	1879	32 40
	Leo. Beck.....	35 " "	1880	24 75
	Jake Lohrer	46¾ hrs. brick work @ 35c.....	1881	16 35
	Chas. Rost	52 hrs. brick work @ 45c	1882	23 40
	H. L. Wiley.....	69 " "	1883	31 05
23	W. I. Chamberlain	Expenses at meeting this day	1884	13 95
26	F. M. Senter, P. M.....	500 2c. stamps.....	1885	10 00
	J. T. Mack.....	Exp board meeting, etc.....	1886	20 15
27	Wm. Weir.....	1 mo. salary.....	1887	20 00
	H. C. Kennedy, Supt.....	Pay roll, workmen.....	1888	3,486 35
	F. O. Clements.....	Acct. Nov. inst., salary.....	1889	10 00
	Maggie Zimmerman.....	Serv. domestic 1 week	1890	2 50
	A. V. Bleininger.....	November inst., scholarship, Ceramics	1891	20 00
29	H. E. Kennedy	Pay roll, workmen	1892	51 85
30	F. W. Prentiss, V. Pres.	Int. 150M. bonds payable U. S. Mtg. & T. Co., N. Y.....	1893	3,375 00
	F. W. Prentiss, V. Pres.	Int. on bonds due December 1, 1897	1894	4,650 00
	L. B. Wing	Expenses meeting since Jan. 4, 1897	1895	84 00
	Chas. Toole.....	4 days timekeeper Towns. Hall	1896	6 70
Dec. 1	Olive B. Jones	⅟₁₀ sal. Dec. inst., '97.....	1897	120 00
Nov. 30	H. J. Noyes.....	Salary for Nov. 1897	1898	166 66
Dec. 2	Maggie Zimmerman.....	1 week service Dept. Dom. Science.....	1899	3 00
	Lucy Allen.....	225 hrs. work @ 20c	1900	45 00
	Jas. Clark	Plastering.....	1901	552 48
	J. W. Coulson & Co.....	Painting and glazing	1902	1,150 00
	C. L. Wattering.....	Hauling brick.....	1903	21 50
	F. D. Cope	9 days' work @ $1.50.....	1904	13 50
	G. R. Butler & Co	Mill work, etc.....	1905	2,000 00
6	C. E. Morris & Co.....	Hand power elevator.....	1906	140 00
	W. U. Teleg. Co.....	Message	1907	25
	A. S. W. Huffman.....	Steam fitting.....	1908	300 00
	R. A. McClure.....	Lumber	1909	140 77
	Kilbourne-Jones Co.....	Glass	1910	13 48
	M. J. Bergin Lumb. Co..	Lumber	1911	109 92
	Chas. Wuichet & Co.....	Tile roofing..... ...	1912	1,500 00
	Saunders & Esswein.....	Plumbing	1913	2,000 00
	Acme Paving Co.....	Material per contract	1914	1,069 30
	R. A. McClure.....	Mill work	1915	1,000 00
	C. O. Paper Co.....	Deadening felt	1916	7 05
	Taylor Mantel & G. Co..	Tile and mill work	1917	500 00
	Hayden, Min & Mfg. Co	Tile partition.....	1918	58 23
	New Lex. Press Bk. Co..	Error in freight charge.....	1919	7 73
	Gilsonite Rf. & Pav. Co	Fire proof roofing, etc.....	1920	1,500 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 6	Engelke & Bigelow	Freight and hauling	1921	$90 61
	C., S. & H. Ry. Co	" " switching	1922	155
	C. Durner	Sharpening tools	1923	14 60
	Climax Stone Co	Stone	1924	84 05
	Col. Supply Co	Oil cans	1925	90
	F. Ward	Weighing sand	1926	1 50
	Tallmadge Hdw. Co	Hardware	1927	44 00
	Warthorst & Co	Brick	1928	250 00
	Standard Oil Co	Oils	1929	3 90
	Adam Wagner	Hoist and engine rent	1930	59 00
	Penna. Fuel Co	Hauling sand	1931	97 80
	Pedrick & Ferris	Mortar	1932	425 92
	Homegardner Sand Co	Sand	1933	13 93
	Buckeye Press Brick Co	Brick	1934	43 00
	C., A. & C. Ry. Co	Freight	1935	84 58
	H. E. Kennedy, Supt	Special pay roll	1936	325 95
	Fultonham Brick Co	Common brick	1937	253 78
	W. U. Terra Cotta Co	Terra cotta	1938	227 81
	L. Schreiber Sons Co	Structural iron	1939	1,000 00
	J. C. Hearn & Co	Friction clamps, etc	1940	6 50
	White & Pixley	Elect. work	1941	600 00
	F. O. Schoedinger	Tile wk., galv. iron, etc	1942	1,942 93
	Fish Stone Co	Stone	1943	32 35
	Ruggles-Gale Co	Stationery	1944	1 85
	Fitzpatrick & Hoepfner	Plumbing	1945	1,200 00
	W. U. Telegraph Co	Telegrams	1946	2 80
	C. E. Morris & Co	Iron	1947	5 00
	Lawrence Press Co	Stationery	1948	10 20
	Schoedinger Fearn & Co	Hardware	1949	46 94
	C. U. Telephone Co	Service	1950	95
	T. J. Dundon & Co	Lumber	1951	988 97
	A. H. McIntyre	28 3-11 hrs. elect wk. @ 10c	1952	2 87
	M. C. Hunter	10¼ " " " " "	1953	1 05
	J. R. Spurrier	82 hrs. wk. @ 20c	1954	16 40
	D. R. Starbuck	43¾ " " 10c	1955	4 35
	O. A. Davis	92½ " " 12½c	1956	16 14
	C. E. Lee	40¼ " " 10c	1957	4 05
	A. T. Kaseley	31¼ " " 12½c	1958	3 91
	J. S. Farsons	27 hrs. grading @ 12½c	1959	3 38
	E. E. Fisher	57 " " "	1960	7 13
	E. C Colton	62 " " "	1961	7 75
	A. D. Mason	22½ " " "	1962	2 82
	B. W. Hershey	59 " " "	1963	7 38
	T. H. Snyder	50 " " "	1964	6 25
	W. Gilmore	43 " " "	1965	5 38
	B. C. Sanders	22 " " "	1966	2 75
	H. L. Belden	43 " " "	1967	5 36
	J. G. Ridinger	50 " " "	1968	6 25
	F. C. Kettler	40 " " "	1969	5 00
	F. W. Bunker	31 " " "	1970	3 88
	D. W. Galehouse	26 " " "	1971	3 25
	C. H. Clevenger	70 " " "	1972	8 75
	E. S. Ream	79 " " "	1973	9 88
	A. F. Wilcox	243 " 15c	1974	36 45
	M. J. Marion	37 " 12½c	1975	4 63

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 6	E. Thornberg	51 hrs. grading @ 12½c	1976	$6 38
	R. S. Peters	27 " 12½c	1977	3 38
	F. Rubins	36 " 12½c	1978	4 50
	H. J. Hammond	11 " 12½c	1979	1 38
	R. E. Whiting	61 " 12½c	1980	7 63
	F. W. Ditto	9 " 12½c	1981	1 13
	A. F. Conradi	32 " 12½c	1982	4 00
	C. W. Breese	18 " 12½c	1983	2 25
	J. A. Thompson	131 " 12½c	1984	16 38
	H. Huff	24 " 12½c	1985	3 00
	Jay Palmer	47 " 12½c	1986	5 88
	W. T. Kelley	45 " 12½c	1987	5 63
	W. Chantler	63 " 12½c	1988	7 88
	T. S. Aten	14 " 12½c	1989	1 75
	Champlin Ptg. Co	Blanks, cards, etc	1990	65 95
7	H. Haerlein	Services as L. S. gardner	1991	19 80
	H. H. Loomis	14 hrs. camp work @ 12½c	1992	1 75
	E. A. Marsh	80½ " 20c	1993	16 10
	S. Teter	9 " 12½c	1994	1 13
	J. C. Perry	65 " 12½c	1995	8 13
	J. C. Britton	59 " 15c	1996	13 35
	Library Bureau	Library supplies	1997	16 59
	Jas. Penn	Hauling	1998	2 00
	H. H. Ballard	1 sample box	1999	75
	Boston Book Co	Books	2000	43 00
	Burrows Bros. Co	"	2001	102 70
	J. M. Hipple	23½ hrs. work @ 10c	2002	2 32
	Office Spec. Mfg. Co	1 index cabinet, etc	2003	6 25
	E. Rath	Living age index	2004	10 00
	G. G. Leinbaugh	12 hrs. work @ 10c	2005	1 20
	J. H. Hertner	25 " 10c	2006	2 55
	O. B. Jones	Paper knives, etc	2007	4 00
	G. E. Stechert	Books, periodicals	2008	96 93
	W. U. Teleg. Co	Messages	2009	2 15
	Alexis Cope	Exp. to Circleville, Page will case	2010	3 00
	C. O. Oil Co	1 barrel oil	2011	9 97
	McAllister, Mohler & Co	Office furniture	2012	30 50
	Standard Oil Co	Oils	2013	31 50
	Webb Sta. & Ptg. Co	Office stationery	2014	5 25
	Smith P. T. Writer Co	2 typewriters, etc	2015	52 85
	C. O. Paper Co	Note paper	2016	1 25
	L. McCormick	1 picture frame	2017	21 50
	W. C. Wren, Adjt. 17th	Band service, prize drill	2018	20 00
	Col. Street Ry. Co	1 large car No. 293	2019	8 00
	R. J. West	82½ hrs. guide work @ 12½c	2020	10 25
	R. J. Seymour	90 " 12½c	2021	11 25
	Franklin Fuel Co	Coal del. Nov., 1897, anthracite	2022	82 07
	E. A. Cole & Co	Coal, smithing	2023	3 03
	Murray City Coal Co	Coal del. Nov., '97	2024	574 24
	Col. Sewer Pipe Co	Sewer pipe	2025	5 58
	Col. Brass Co	Couplings	2026	60
	Penn Fuel Co	Sand	2027	5 11
	Buckeye Leather Co	1 strip hemlock	2028	50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 7	Wassall Fire Clay Co ...	Paving blocks	2029	$20 74
	Kelton & Converse	Lumber	2030	7 93
	Schiff, Jordon & Co	Carbons	2031	22 94
	H. Cole	Blue print paper	2032	80
	Taylor Mantel & G. Co.	1 piece oak	2033	75
	Fish Press Brick Co	Filters, President's House	2034	2 00
	J. L. D. Nichols	1 day's work @ $1.50	2035	1 50
	C. Loveberry	600 trays, etc	2036	6 00
	Thos. Bonde	30 days as fireman @ $1,50	2037	45 00
	J. Stainbrook	30 "	2038	45 00
	J. P. Friez	Instruments	2039	30 50
	Z. L. White & Co	5c. cloth	2040	50
	Bissell, Dodge & E. Co.	Electrical supplies	2041	4 89
	S. S. Freeman	Drawing materials	2042	2 55
	Nitschke Bros	2,000 tickets	2043	3 75
	Ruggles-Gale Co	Pens, ink, etc	2044	2 50
	C. O. Paper Co	Sheathing	2045	1 38
	The Peoples' Store	1 screen, 1 glass	2046	7 00
	Pratt Institute	4 meat charts	2047	10 00
	J. H. Randall	9 hours carp. work @ 25c	2048	2 25
	G. F. Wheeler	Groceries, Lab. Dom. Science	2049	10 93
	P. G. Bowman	Groceries, etc	2050	2 20
	Sam Smith	Groceries, Lab. Dom. Science	2051	8 95
	Bradley, Munk & Co	Supplies, "	2052	134 57
	Bausch Lomb Opt. Co.	Microscopes	2053	151 40
	Payne, McDonald Co	Hardware	2054	26 71
	E. L. Fullmer	81 hours work @ 15c	2055	12 15
	A. H. Smythe	1 roll stencil paper, etc	2056	2 35
	W. A. Kellerman	Department supplies	2057	21 25
	A. R. Campbell	10 hours work @ 20c	2058	2 00
	John McAllister	39 hours work @ 15c	2059	5 85
	Tallmadge Hdw. Co	Hardware	2060	2 93
	Borger Bros & Co	Repairs on ladle, etc	2061	2 50
	Pickering Hdw. Co	Rules, etc	2062	24 12
	E. A. Kinsey Co	Tools, etc	2063	116 82
	P. Hayden S. H. Co	Pig iron, etc	2064	67 21
	W. W. Wight	Materials, slating, etc	2065	2 50
	Chicago Brass Co	Brass	2066	1 00
	J. A. Fay & Egan Co	Saw blades, etc	2067	1 00
	Blackwood, Green & Co	Galvanized iron, etc	2068	22 29
	E. E. Graham	14 hrs. in foundry @ 10c	2069	2 10
	W. Erdman	42 hrs. work @ 17½c	2070	7 35
	J. H. Nold	46 " 15c	2071	6 90
	E. H. Bailey	58 " 15c	2072	8 70
	H. Graham	24 " 15c	2073	3 60
	H. Gamper	96 " 15c	2074	14 40
	J. H. Lesh	18 " 15c	2075	2 70
	H. Braun Sons & Co	Oils, etc	2076	2 35
	D. Singleton	1½ day's work with helper	2077	7 50
	Nitschke Bros	Stationery	2078	5 70
	Kilbourne & J. Mfg. Co.	Repairing Plow	2079	75
	F. S. Johnston	108 hour's steno. @ 12½c	2080	13 50
	John Dewey & Co	Posts and braces	2081	10 00
	J. F. Williams & Sons	2,000 barrels gluten meal	2082	12 00
	Nitschke Bros	Letter heads, etc	2083	11 25

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Am
1897.				
Dec. 7	H. Long	Fencing, etc	2084	$
	A. F. Hall	1 mo. work	2085	
	E. W. Dean	11 hours work @ 15c	2086	
	E. H. Bailey	18 hours work @ 15c	2087	
	Kelton & Converse	Lumber	2088	
	Engelke & Bigelow	Labor placing heater	2089	
	D'Este & Seeley	Steam trap	2090	
	T. J. Dundon & Co	Lumber	2091	
	Cap. City Mch Wks	Mch. steel, etc	2092	
	Bo ger Bros. & Co	1 steel box	2093	
	H. Cole	2 pencil leads	2094	
	W. H. Miller	1 Crosby indicator	2095	
	J. H. Lesh	5 hours work @ 15c	2096	
	C. M. Ruhlen	3 "	2097	
	C. J. Morrow	9 hours work @ 12½c	2098	
	F. J. Hale	9 hours work @ 15c	2099	
	D. W. Galehouse	4½ hours work @ 12½c	2100	
	The Lunkenheimer Co.	Valves, etc	2101	
	The Ashton Valve Co	"	2102	
	Tallmadge Hardware Co	Hardware	2103	
	Riehle Bros	1 gear guard	2104	
	Thompson & Bushnell	1 reducing wheel	2105	
	Col. Supply Co	Pipe and fittings	2106	
	Simmons Hardware Co.	Hardware	2107	
	Rochester Opt. Co	Photo app	2108	
	Blackwood, Green & Co	Scrap copper	2109	
	Green, Joyce & Co	Towels	2110	
	Seraphim Blank Bk. Co.	300 books	2111	
	Kauffman-Lattimer Co.	Chemicals, etc	2112	1
	Kimball & Mathews	Photo supplies	2113	
	Howe Scale Co	3,000-lb Bullock scale, etc	2114	2
	W. Chantler	180.6 hrs. work @ $1.50	2115	
	Col. Mantel Tile & M. Co	Slate, etc	2116	
	G. E. Stechert	Books	2117	
	North Side Ice Co	Ice	2118	
	T. E. French	Labeling cases, etc	2119	
	J. V. Denney	Cash paid Stevensons works	2120	
	Col. Gas Co	Coke, etc	2121	
	C. G. Newton & Co	Special steel tape	2122	
	Cap. City Mch. Wks	Castings, etc	2123	
	G. E. Bell	Library work	2124	
	H. Braun Sons & Co	Glue, etc	2125	
	J. G. Biddle	Instruments	2126	1
	Jeffrey Mfg. Co	Bal. due on machinery	2127	1
	Edw. Penrock	Resilvering mirror, etc	2128	
	Niagara Clip Co	10 boxes clips	2129	
	Richards & Co	Objectives	2130	
	Engelke & Bigelow	Freight and cartage	2131	
	Bissell, Dodge & E. Co.	Elec. supplies	2132	
	Griswold, Sohl & Co	Iron supplies	2133	
	McClelland & Co	Pencil, paper, etc	2134	
	Schoedinger, Fearn & Co	Hardware	2135	
	Std. Underg'd Cable Co.	Cable reel, etc	2136	
	J. M. & W. Westwater	1 glass punch bowl	2137	
	Tallmadge Hdw. Co	Hardware	2138	

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 7	Col. Rubber & B. Co.....	Pipe, etc.....	2139	$356 56
	Paul System Co.....	Angle cocks, etc.....	2140	17 60
	New Col. Bridge Co.....	Metal work.....	2141	16 95
	Blackwood, Green & Co	Hardware	2142	44 75
	Col. Supply Co.....	Pipe and fittings.....	2143	106 56
	Post-Glover Elec. Co.....	Conduits	2144	47 17
	M. P. Streett.....	Brick, etc.....	2145	170 02
	C. H. Woodruff.....	Carpenter work.....	2146	63 49
	J. Garretson.....	21 days @ $1.50.....	2147	31 50
	H. Chantler.....	11 "	2148	17 55
	L. R. Krumm.....	39½ hours work @ 10c.....	2149	3 95
	E. G. Webster.....	63½ hours work @ 12½c.....	2150	7 93
	W. E. Chappell.....	Elect. work.....	2151	13 64
	R. E. McIntosh.....	62 hours @ 10c.....	2152	6 20
	F. L. Estep.....	Elect. work.....	2153	1 05
	William Case	Labor, eng. department	2154	40 50
	M. Peck.....	Labor, steam fitter.....	2155	43 50
	J. H. Randall.....	Carpenter work	2156	22 00
	M. Staley.....	9 hours work @ 10c.....	2157	90
	A. E. Loeb.....	76½ hours work @ 17½c.....	2158	13 39
8	D. M. Massie.....	Expense trustees, July 1 to date.....	2159	23 55
9	Maggie Zimmerman.....	1 week's service department Dom. Science.....	2160	3 00
10	H. E. Kennedy.....	Service as superintendent.....	2161	350 00
11	Hall, Carlile & B.....	Lath	2162	47 52
	H. E. Kennedy, Supt.....	Pay roll for workmen.....	2163	2,259 60
	W. U. Telegraph Co.....	Messages.....	2164	2 84
14	Col. Gas Co.....	Gas for November, 1897.....	2165	140 47
15	J. F. Marion	13¾ hours brick work @45c..	2166	6 20
	Saunders & Esswein ...	Plumbing	2167	675 00
	H. A. Weber.....	1/10 salary Dec. inst., 1897.....	2168	225 00
18	A. M. Bleile.....	" "	2169	225 00
	W A Kellerman.....	" "	2170	225 00
	C. N. Brown.....	" "	2171	225 00
	A. C. Barrows.....	" "	2172	225 00
	Edw. Orton.....	" "	2173	225 00
	E. A. Eggers.....	" "	2174	225 00
	J. R. Smith.....	" "	2175	225 00
	G W Knight.....	" "	2176	225 00
	W A. Lazenby.....	" "	2177	225 00
	S. C. Derby	" "	2178	225 00
	R. D. Bohannan.....	" "	2179	225 00
	W. T. Magruder.....	" "	2180	225 00
	J. P. Gordy.....	" "	2181	225 00
	W H. Scott.....	" "	2182	225 00
	B F Thomas.....	" "	2183	225 00
	J. V Denney...	" "	2184	225 00
	B. L. Bowen.....	" "	2185	225 00
	D. S. Kellicott.....	" "	2186	225 00
	A. L. Williston.....	" "	2187	225 00
	N. W. Lord.	" "	2188	200 00
	G. B. Kauffman.....	" "	2199	200 00
	W. McPherson.....	" "	2190	200 00
	F. A. Ray.....	" "	2191	200 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 18	Edw. Orton, Jr	⅟₁₀ Salary Dec. inst., 1897	2192	$180 00
	J. N. Bradford	" "	2193	180 00
	G. W. McCoard	" "	2194	160 00
	H. C. Lord	" "	2195	150 00
	E. A. Hitchcock	" "	2196	150 00
	W. D. Gibbs	" "	2197	140 00
	P. G. Bowman	" "	2198	140 00
	F. C. Caldwell	" "	2199	140 00
	D. S. White	" "	2200	140 00
	S. A. Norton	" "	2201	120 00
	R. I. Fulton	" "	2202	120 00
	J. E. Boyd	" "	2203	110 00
	C. E. Sherman	" "	2204	100 00
	T. E. French	" "	2205	100 00
	C. W. Mesloh	" "	2206	100 00
	F. C. Clark	" "	2207	100 00
	W H. Siebert	" "	2208	100 00
	A. N Hodgman	" "	2209	100 00
	J. R. Taylor	" "	2210	100 00
	J. A. Bownocker	" "	2211	90 00
	W. A. Knight	" "	2212	90 00
	C. W. Weick	" "	2213	90 00
	C. C. Sleffel	" "	2214	90 00
	C. W. Foulk	" "	2215	85 00
	C. L. Arnold	" "	2216	85 00
	K. D. Swartzel	" "	2217	85 00
	C. A. Dye	" "	2218	85 00
	J. S. Hine	" "	2219	85 00
	J. H. Schaffner	" "	2220	80 00
	C. Wiseler	" "	2221	80 00
	W. L Graves	" "	2222	80 00
	C. A. Bruce	" "	2223	80 00
	C. W. Burkett	" "	2224	75 00
	W. F. Lavery	" "	2225	70 00
	F. Haas	" "	2226	70 00
	A. E. Vinson	" "	2227	65 00
	F. L. Landacre	" "	2228	65 00
	E. M. Van Harlingen	" "	2229	60 00
	T. K. Lewis	" "	2230	60 00
	E. E. Harrold	" "	2231	70 00
	H. Townshend	" "	2232	55 00
	F. E. Kester	" "	2233	55 00
	Maude Jeffrey	" "	2234	50 00
	Gertrude Kellicott	" "	2235	50 00
	W. L. Evans	" "	2236	40 00
	J. T. Martin	" "	2237	40 00
	J. R. Spurrier	" "	2238	35 00
	H. W. Kuhn	" "	2239	30 00
	H. Judd	" "	2240	30 00
	J. H. Fox	" "	2241	30 00
	J. F. Cunningham	" "	2242	30 00
	J. G. Boyd	" "	2243	25 00
	C. B. Frederick	" "	2244	25 00
	F. O. Clements	" "	2245	20 00
	R. Fischer	" "	2246	20 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 18	A. V. Bleininger	1/10 salary Dec. inst., 1897	2247	320 00
	T. F. Hunt	" " "	2248	250 00
	F. W. Prentiss	Salary for December, 1897	2249	33 33
	C. Riddle	1/10 salary Dec. inst., 1897	2250	20 00
	O. A. Davis	" " "	2251	10 00
	W. E. Chappell	" " "	2252	10 00
	H. Gamper	" " "	3253	10 00
	K. Nurian	" " "	2254	10 00
	E. E. Somermeier	" " "	2255	10 00
	W. F. Hunter	" " "	2256	250 00
	W. H. Page	" " "	2257	100 00
	E. B. Kinkead	" " "	2258	100 00
	D. F. Pugh	" " "	2259	70 00
	E. O. Randall	" " "	2260	65 00
	J. P. Jones	" " "	2261	35 00
	G. W. Knight	" " "	2262	25 00
	F. F. D. Albery	" " "	2263	15 00
	J. H. Collins	" " "	2264	10 00
	J. H. Canfield	Salary for December, 1897	2265	500 00
	Alexis Cope	" " "	2266	187 50
	W. C. McCracken	" " "	2267	125 00
	Jean Blackford	" " "	2268	50 00
	Edith Cockins	" " "	2269	54 17
17	W. I. Chamberlain	Expenses attending meeting this day	2270	12 65
18	C. B. Hine	Salary for December, 1897	2271	50 00
	C. Low	" " "	2272	54 17
	M. H. Cook	Services as janitor	2273	15 00
	Wm. Standley	Salary for December, 1897	2274	45 00
	B. LeBay	" " "	2275	45 00
	G. R. Rose	" " "	2276	65 00
	J. H. Brown	" " "	2277	45 00
	Mary H. L. Cope	" " "	2278	50 00
	Jas. Kelly	" " "	2279	41 67
	F. B. Brewer	" " "	2280	40 00
	John Adams	" " "	2281	40 00
	John Conrad	" " "	2282	40 00
	C. Loveberry	" " "	2283	25 00
	Edw. Stalter	" " "	2284	20 00
	Wm. Weir	" " "	2285	20 00
	J. B. Parker	" " "	2286	13 50
	W. R. Beattie	" " "	2287	54 17
	Arthur Chantler	" " "	2288	45 00
	Wm. Whitestine	" " "	2289	45 00
	Wash. Townsend	" " "	2290	30 00
	W. B. Calkins	88 hours store room @ 15c	2291	13 20
	Maggie Zimmerman	2 weeks service Dep. Domestic Science	2292	6 00
1898.				
Jan. 10	Col. Brass Co.	Castings, etc	2293	2 10
1897.				
Dec. 18	M. Dresback	1/10 salary Dec. inst., 1897	2294	30 00
	N. Tegnel	Work in Dep. Domestic Science	2295	1 50
	R. Fischer	Student Assistant, Gen'l Chem.	2296	8 40
	B. Shirk	38 hours work @ 15c	2297	5 70

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Dec. 18	C. L. Wattering	Hauling brick	2298	7 00
	John McCarthy	33 hours work @ 15c	2299	4 95
20	W. L. Evans	On account salary	2300	28 00
	F. O. Clements	Work Dept Chemistry	2301	5 00
	F. M. Senter, P. M	500 1c, 500 2c. stamps	2302	15 00
	L. B. Powell	Serv. as Quartermaster	2303	5 00
21	N. P. Oglesby	42 hours work @ 15c	2304	6 30
22	J. W. Coulson & Co	Painting and glazing	2305	400 00
	C. E. Barnet	1½ days work @ $2	2306	3 00
	E. H. Bailey	33½ hours @ 15c	2307	5 03
23	F. W. Prentiss, Vice Pt.	Error in interest on bond transaction	2308	1 71
24	H. E. Kennedy, Supt	Pay roll laborers new buildings	2309	2,041 55
	C. T. Morris	December inst., '97, McMillin Fellowship	2310	30 00
28	Adam Masterton	16 hours stone work @ 40c	2311	6 40
	Wm. Halstead	16 " "	2312	6 40
	F. Lawwell	18 hrs. water carrier @ 11 1-9c	2313	2 00
	F. M. Senter, P. M	2000 1c stamps	2314	20 00
	H. J. Noyes	December salary, 1897	2315	166 66
	J. T. Mack	Expenses meeting December 17, 1897	2316	9 90
30	B. & O. R. R	Freight on Hippopotamus to Rochester	2317	5 48
1898.				
Jan. 3	Albert Russell	23 hours work @ 15c	2318	3 45
	C. H. Harris	45 " "	2319	6 75
	Albert Edwards	43½ hrs. brickwork @ 45c	2320	19 55
	B. Edwards	43½ " "	2321	19 55
4	F. Pursell	39½ " "	2322	17 75
	F. M. Senter, P. M	Stamps, 600 1c, 300 6c, 100 5c and 50 4c	2323	21 00
	F. M. Senter, P. M	500 1c, 500 2c, 100 5c. stamps	2324	20 00
	Col. St. Ry. Co	Tickets, 5 packs	2325	5 00
5	E. A. Marsh	36 hours carpenter work, @ 20c	2326	7 20
	Jas. Clark	Plastering	2327	349 00
	Jas. L. Clark	Plastering Biological Building	2328	265 00
	W. H. Leete	Exp. Evans v. Board of Trustees	2329	50 00
	Maggie Zimmerman	2 wks. Dept. Dom. Science	2330	6 00
8	R. J. Seymour	118 hours guide work, @ 12½c	2331	14 75
	Col. Rubber & Belt. Co.	Pipe and fittings	2332	89 47
	Studer Bros	1 book	2333	22 50
	Library Bureau	Tables	2334	94 50
	Locomotive Engineer'g	1 copy "World's Railway"	2335	7 50
	Burrows Bros. Co	Books	2336	24 27
	Am. Soc. Mech. Eng	Binding 1 book	2337	1 25
	The Kip Binder	5 boxes klips and postage	2338	2 59
	G. E. Stechert	Books	2339	292 78
	Hann & Adair	250 schedules	2340	3 50
	Benj. Rushmer	Blacksmithing	2341	47 40
	Blackwood, Green & Co	Hardware and supplies	2342	24 04

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Total.
1898.				
Jan. 8	Jacob Weisheimer	Feed	2343	$11 30
	S. J. Nathans	Prints	2344	4 25
	W. U. Teleg. Co	Messages	2345	65
	Col. Calcium Light Co	Gas, etc	2346	6 25
	Cher'gton Ptg.&Eng.Co	1 tube ink	2347	50
	Chas. Hansens' Labr	Lactic ferment	2348	1 95
	India Alkali Works	1 keg house savogran	2349	4 68
	C. H. Clevenger	33 hours work @ 12½c	2350	4 13
	J. C. Britton	27 " 15c	2351	4 05
	F. S. Johnson	165 " 12½c	2352	20 62
	G. A. Flickinger	13 " 15c	2353	1 95
	A. F. Wilcox	85 " 15c	2354	12 75
	H. L. Belden	50 " 12½	2355	6 25
	Cap. City Mch. Works	Materials and labor	2356	3 85
	John Kane	120 hours work @ 12½c	2357	15 00
	C. J. Morrow	17 " 12½c	2358	2 13
	Lucy Allen	150 " 20c.	2359	30 00
	Alexis Cope	Cash advanced R. Leet, exp. Evans v. Trustees	2360	26 85
	E. A. Cole & Co	Coal	2361	3 03
	H. E. Brown & Sons	Slips, labels, etc	2362	7 75
	McMillan Co	1 Vine botany	2363	3 65
	Thos. Algeo	Work on buildings	2364	37 35
	Marion Peck	31 days @ $1.50	2365	46 50
	H. Chantler	Work dairy department, etc	2366	38 25
	C. H. Woodroff	41 hours carpenter work @ 27½c	2367	11 38
	Kauffman, Lattimer Co.	Chemicals, etc	2368	30 72
	Kimball & Matthews	2 trays, etc	2369	1 74
	J. W. Coulson & Co	Painting and glazing	2370	670 50
	M. J. O'Donnell & Co	Repairs on electric switch	2371	23 25
	P. G. Bowman	Groceries	2372	2 33
	Henry Goldsmith	Band instruments	2373	53 00
	Cap. City Mch. Works	16 drawer locks	2374	1 60
	Wm. Summer	Belts	2375	5 00
	The Rob't Clarke Co	Books	2376	10 00
	H. Braun Sons & Co	Grinding and polishing instruments	2377	2 60
	Bausch, Lomb Opt. Co	Objectives	2378	7 20
	Hann & Adair	125 copies of 8 cuts	2379	2 40
	Harper Ills. Syn	Cuts	2380	17 68
	Sparhawk & Detchon	Feed	2381	21 95
	H. Braun, Sons & Co	Instruments	2382	10 75
	H. E. Kennedy, Sup't	Pay roll, workmen new building	2383	1,290 85
	Cols. Rubber & Belt. Co.	Hose, etc	2384	7 50
	Cols. Dispatch	Advertising	2385	13 05
	W. H Haskins	Advertising	2386	35 00
	Blackwood, Green & Co	Hood on forge	2387	7 73
	Col. Supply Co	Pipe and fittings	2388	5 60
	J. C. Perry	82 hours work @ 12½c	2389	10 25
	J. C. Britton	41 hours camp work @ 15c	2390	6 15
	John Keller	Gravel screenings	2391	9 60

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Total.
1898.				
Jan. 8	E. L. Fullmer	46½ hrs. wk. @ 15c	2392	$6 97
	L. C. Riddle	50 " "	2393	7 50
	A. S. W. Huffman	Plumbing, etc	2394	600 00
	W. U. Teleg. Co	Messages	2395	1 39
	Genl. Elect. Co	Lamps	2396	292 50
	C. Durner	Sharpening tools	2397	7 03
	H. Braun Sons & Co	Bottles	2398	20 18
	E. W. Vickers	2 weasels	2399	3 50
10	Bashford Dean	1 Ceratodus	2400	12 00
	D. S. Kellicott	Lab. expenses	2401	9 30
	Palmer Sl de Co	2 gross slides, etc	2402	9 75
	Joe Garretson	21 days @ $1.50	2403	31 50
	Thos. Boude	28 "	2404	42 00
	C. Pixler	18 "	2405	27 00
	Jas. Stainbrook	31 "	2406	46 50
	W. Case	29 "	2407	43 50
	Cherington Ptg. & Eng. Co	1 stamp	2408	25
	C. O. Paper Co	1 blank book, etc	2409	20 00
	Am. D. Teleg. Co	Rent 5 signal boxes	2410	19 40
	The Werner Co	50 ctfs. indebtedness	2411	50 00
	Library Bureau	Catalogue cards	2412	3 00
	Pancoast Vent. Co	2 ventilators	2413	2 00
	C. O. Oil Co	Oils	2414	10 07
	Hasbrook & Byers	2 lantern globes	2415	30
	W. U. Teleg. Co	Messages	2416	2 09
	Webb Sta. & Ptg. Co	1 blank book, etc	2417	16 85
11	Col Wire and Iron Wks.	2 wire mats	2418	12 00
	P. F. Yoerger	Lettering doors	2419	7 50
	Glock & Beck	2 sets Paul's ink	2420	2 00
	A. D. Teleg. Co	Messenger service	2421	75
	C. U. Telephone Co	Telephone service	2422	64 90
	Col. St. Ry. Co	Chartering 4 cars	2423	24 00
	H. Braun Sons & Co	5 gals. lard oil	2424	3 25
	Tracy-Wells Co	Brooms, sponges, etc	2425	25 66
	G. T. Johnson	2 case toilet paper	2426	20 00
	F. R. West	79 hours guide work @ 12½c	2427	9 87
	C. W. Woodruff	Account desk, locks, etc	2428	24 48
	J. A. Thompson	94 hours grading @ 12½c	2429	11 75
	Ohio Pipe Co	Iron threshers	2430	9 80
	Engelke & Bigelow	Freight and hauling	2431	2 15
	Col. Wire & Iron Wks.	Wire stall guards	2432	7 50
	Diebold Safe and Lock Co	Vault door	2433	47 50
	R. A. McClure	Mill work	2434	250 00
	Saunders & Esswein	Plumbing	2435	2,000 00
	C. H. Lyon	Vault door, hauling	2436	35
	Chas. Wuichet & Co	On account contract, sheet metal	2437	772 40
	W. J. Means, M. D	Surgical attention	2438	5 00
	E. S. Ream	42 hrs. grading @ 12½c	2439	5 25
	C. H. Clevenger	51½ " "	2440	6 44
	W. Chantler	108 " "	2441	13 50
	R. E. Whiting	45½ " "	2442	5 69
	F. C. Kettler	18 " "	2443	2 25

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 11	A. F. Wilcox	135 hours work @ 15c	2444	$20 25
	Jay Palmer	9 hrs. wk. @ 12½c, Towns. Hall	2445	1 13
	A. H. Snyder	17 hours work @ 12½c	2446	2 13
	W. Gilmore	13½ " "	2447	1 69
	W. L. Kelly	34 " "	2448	4 25
	J. Cain	20½ " "	2449	2 56
	C. Thornburg	24 " "	2450	3 00
	B. C. Sanders	13 " "	2451	1 63
	H. L. Belden	46½ " "	2452	5 81
	E. C. Cotton	21 " "	2453	2 63
	H. J. Hammond	33½ " "	2454	4 16
	J. G. Ridinger	8 " "	2455	1 00
	W. Gilmore	16 " "	2456	2 00
	E. Fisher	34 " "	2457	4 25
	H. Haerlein	Serv. as landscape gardener	2458	56 10
	J. J. Murray & Co	Lamps	2459	22 61
	P. R. Hord	9 hrs. elec. light work	2460	90
	H. E. Kennedy, Supt	Salary for December, etc	2461	353 77
	V. Young	20 hrs. carp. work @ 15c	2462	3 00
	J. Hertner	12 hrs. elect. work @ 10c	2463	1 20
	W. E. Chappell	38 " 15c	2464	4 95
	J. M. Hipple	33½ " 10c	2465	3 35
	E. G. Webster	73¾ " 12½c	2466	9 22
	O. A. Davis	231½ " 17½c	2467	40 47
	R. E. McIntosh	Electric work	2468	8 47
	L. B. Powell	45½ hrs. elect. work @ 10c	2469	4 55
	R. R. Dunlap	21½ " 10c	2470	2 15
	R. Butterworth	21½ " 10c	2471	2 15
	F. O. Schoedinger	Galv. iron and roofing	2472	1,765 00
	Schoedinger, Fearn&Co	Hardware	2473	11 47
	Schoedinger, Fearn&Co	"	2474	7 42
	Tallmadge Hdw. Co	"	2475	47 83
	C., C., C. & St. L. Ry.Co	Car service	2476	1 00
	J. C. Hearn & Co	Iron	2477	7 60
	C., S. & H. Ry. Co	Freight, etc	2478	61 01
	Buckeye Brick Co	Press brick	2479	39 88
	Fultonham Brick Co	Common brick	2480	110 11
	Fish Stone Co	Flag stone	2481	9 42
	Penna. Fuel Co	Cement and coke	2482	184 02
	L. Schreiber Sons Co	Iron	2483	1,272 17
	W. Caldwell	Lumber	2484	1,500 00
	Warthorst & Co	Press brick	2485	87 82
	Haydenville Min. Co	Tile partition	2486	75 00
	Gilsonite Roof & Pav.Co	Fire proofing	2487	1,050 53
	Bissell, Dodge & E. Co.	Elec. supplies	2488	19 17
	Engelke & Bigelow	Freight and hauling	2489	115 73
	Tallmadge Hdw. Co	Hardware	2490	7 29
	E. J. Waring	1 desk lamp	2491	3 00
	Post Glover Elec. Co	Switches and receptacles	2492	27 60
	Stand Underg'd CableCo	Cables	2493	79 00
	Kelton & Converse	Lumber	2494	5 45
	J. H. Randall	Carp. work	2495	6 75
	C. H. Woodruff	"	2496	35 13
	Pedrick & Ferris	Mortar	2497	140 27
	J. R. Spurrier	119 hrs. elect. work @ 20c	2498	23 80

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 8	C. H. Crumley	18 hours work @ 10c	2499	$1 80
	L. R. Krumm	38 "	2500	3 80
	H. S. Green	32¼ "	2501	3 23
	M. Staley	14½ "	2502	1 45
	A. D. Morley	Carpenter work	2503	14 00
	Col. Supply Co	Pipe and fittings	2504	98 63
	Cap. City Mch. Wks	Shafting, couplings, etc	2505	559 79
	Tallmadge Hdw. Co	Hardware	2506	9 16
	T. J. Dundon & Co	Lumber	2507	89 88
	Lawrence Press Co	Office tationery	2508	2 15
	Minnie Rodgers	Typewriting	2509	46 80
	Blackwood, Green & Co	Brushes and brooms	2510	3 20
	Orr, Brown & Price	Muriatic acid	2511	2 27
	C. O. Paper Co	Deadening felt	2512	50 33
	Champion Iron Co	Structural iron	2513	2,800 00
	White & Pixley	Elect. work	2514	150 00
	Fitzpatrick & Hoepfner	Plumbing	2515	900 00
	W. U. Telegraph Co	Service	2516	2 24
	Kilbourne-Jones Co	Glass, hdw., etc	2517	768 49
	Taylor, Maniel & G. Co	Tile and mill work	2518	342 50
	Acme Paving Co	Laying cement floor	2519	1,252 39
	C. U. Telephone Co	Service	2520	16 50
12	C. E. Morris & Co	Hand power elevator	2521	25 00
	D. C. Beggs & Co	Window shades	2522	150 00
	Saunders & Esswein	Plumbing	2523	600 00
	G. R. Butler & Co	Mill work	2524	2,200 00
	Laidlaw Dunn & G. Co.	steam pump	2525	50 00
	M. P. Street	Mason work on engine	2526	19 00
	Cap. City Mch. Wks	Pulleys, etc	2527	2 87
	Whitman & Couch	1 L. H. receiver	2528	3 50
	Wm. Sumner	Belting	2529	5 00
	Herman Baker & Co	Resistance wire and ribbon	2530	2 76
	Tinius, Olsen & Co	Steel points, etc	2531	5 00
	Cap. City Mch. Wks	Belts, pulleys, etc	2532	13 67
	T. J. Dundon	Lumber	2533	5 62
	T. T. Tress	2d hand timer	2534	4 00
	Tallmadge Hdw. Co	Hardware	2535	96
	New Col. Bridge Co	Angle rods	2536	8 00
	Crosby Steam Gauge Co	Gauges, etc	2537	59 65
	Simmons Hdw. Co	Hardware	2538	75
	P. Hayden S. H. Co	Iron, etc	2539	3 60
	H. Oram	Scale	2540	2 00
	Krauss, Butler & B. Co.	Shades	2541	2 30
	W. H. Gilmore	14 hours work @ 12½c	2542	1 75
	Col. Supply Co	Pipe and fittings	2543	45 39
	P. A Hord	5 hours work @ 12½c	2544	63
	M. Cook	88 "	2545	11 00
	J. Cain	3 "	2546	38
	M. C. Hunter	9 hours elect. work @ 10c	2547	90
	E. H. Bailey	9 hours work @ 15c	2548	1 35
	Sherwood Mfg. Co	Repairs on cleaner	2549	3 51
	Burgess Sold. Furn. Co.	Repairs on rubber bulb	2550	60
	P. Hoerlein	1 boiler tube cleaner	2551	12 50
	Jeffery Mfg. Co	Couplings	2552	5 00
	Paul System Co	Repairs reducing valve	2553	5 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 12	Blackwood, Green & Co.	Hardware	2554	$6 61
	Ch'gton Ptg. & Eng. Co.	1 stamp	2555	80
	R. H. Brown & Co	Cutters	2556	32
	Col. Paint Mfg. Co	1 duster	2557	95
	F. Charles	Hauling	2558	1 25
	West'ghouse Glass Fty.	Arc globes	2559	9 00
	D'Este & Seeley Co	1 trap and floats	2560	22 10
	L. S. Wells	Paper hanging	2561	24 75
	Blackwood, Green & Co.	Galv. iron, etc	2562	24 39
	F. O. Schoedinger	Repairs on roof Chem. hall	2563	1 55
	Yale & T. Mfg. Co	Locks	2564	4 95
	Stitt, Price & Co	Cement	2565	2 00
	Jeffrey Mfg. Co	Couplers	2566	1 00
	Murphy Iron Wks	12 ratchet pawls	2567	2 40
	A. E. Loeb	Elect. plant work	2568	9 71
	C. A. Grate	6½ hrs. wk. @ 15c	2569	98
	D. Y. Murdoch	Adv.	2570	10 00
	Champlin Ptg. Co	Blanks, cards, etc	2571	4 75
	Enquirer Co	Adv	2572	16 65
	Leader Ptg. Co	"	2573	10 40
	Investor Pub. Co	"	2574	5 00
	O. S. Journal Co.	"	2575	12 75
	Hann & Adair	Com. prog, etc	2576	37 25
	Toledo Com'l	Adv	2577	16 00
	The Lantern	"	2578	85 00
	G. E. Stechert	1 book	2579	3 13
	Lawrence & Greenwald	1,000 report slips	2580	2 00
	L. E. Barringer	8 hrs. work @ 12½c.	2581	1 00
	Kelton & Converse	Lumber	2582	1 60
	Krauss, Butler & Co.	1 shade	2583	2 15
	Edw. Orton, Jr.	Cash adv. J. McAllister	2584	1 70
	Standard Oil Co	Gasoline	2585	24 51
	Moonstone C. Slate Co.	Refilling case, etc	2586	1 70
	Col. Rub. & Belting Co.	Belt, etc	2587	2 14
	Eldridge & H. Co	1 No. 5 Ent. coffee mill	2588	6 80
	Fish Stone Co	Saw blades, etc.	2589	75
	Penn. Fuel Co	Coal	2590	2 10
	P. Hayden Co	Lab. and mat'l changing brick ties	2591	24 85
	Tallmadge Hdw. Co	Hardware	2592	2 73
	F. Charles	Hauling	2593	2 00
	B. F. Goodrich Co	6 gaskets	2594	4 80
	J. McL. Smith	Exp. meetg. Nov. 23 to Jan. 12, '98	2595	11 20
14	T. J. Godfrey	Exp. meetg. and in Evans case	2596	34 20
12	W. I. Chamberlain	Exp. meetg. Jan. 12, 1898	2597	7 60
13	B. Fahmer	19 hrs. stone wk. @ 17½c.	2598	3 30
	Maggie Zimmerman	1 wk. dep. dom. science	2599	3 00
	A. F. Hall	1 mo. salary, Dec., '97	2600	60 00
14	J. P. Shannon	54 hrs. carp wk. @ 25c	2601	13 50
	E. Hiatt	54 "	2602	13 50
	H. Cummins	44½ hrs. stone work @ 17½c.	2603	7 80
	Tom McCoy	53 hrs. carp. wk. @ 15c.	2604	7 95
	I. Smith	Work as teamster	2605	10 80
	Geo. Wilson	37 hrs. stone work @ 17½c.	2606	6 45

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 14	Geo. Cook	45 hours carp. work @ 25c	2607	$11 25
	V. T. Fishbaugh	54 " "	2608	13 50
	J. McGraw	54 " "	2609	13 50
	F. Shannon	45 " "	2610	11 25
	F. Donnely	Brick and stone work	2611	7 85
	E. A. Worley	Stone work	2612	8 45
	Geo. Steele	Carpenter work	2613	7 95
8	F. W. Sturdivant	Expenses witness, Evans vs. Trustees	2614	50 00
15	J. Vennard	55 hrs. stone work @ 40c	2615	22 00
	A. Reibly	52 " "	2616	20 80
	J. Cunningham	55 " "	2617	22 00
	L. Wattering	Hauling brick	2618	70 89
17	J. H. Nolan	20 hours brick work @ 45c	2619	9 00
	I. P. Roberts	Expenses address Townshend Hall dedication	2620	32 80
20	F. M. Senter, P. M.	600-1c., 500-2c., 100-5c., stamps	2621	21 00
21	Maggie Zimmerman	Services as maid	2622	3 00
	Col. Gas Co	Gas used n December, '97	2623	152 40
22	F. M. Senter, P. M.	Dep. for 2d class matter	2624	10 00
	H. E. Kennedy, Supt.	Pay roll workmen new bldgs	2625	649 10
	J. H. Brigham	Exp. as speaker Townshend Hall dedication	2626	15 00
	H. W. Wiley	Exp. as speaker Townshend Hall dedication	2627	34 00
24	Co. Recorder Pick. Co.	Recording deed	2628	1 00
28	A. W. Kight	23 hours work @ 15c	2629	3 45
	Maggie Zimmerman	1 week's work	2630	3 00
29	H. A. Weber	1/10 salary, January inst. 1898	2631	225 00
	A. M. Bleile	" "	2632	225 00
	W. A. Kellerman	" "	2633	225 00
	C. N. Brown	" "	2634	225 00
	A. C. Barrows	" "	2635	225 00
	Edw. Orton	" "	2636	225 00
	E. A. Eggers	" "	2637	225 00
	R. Smith	" "	2638	225 00
	G. W Knight	" "	2639	225 00
	W. R. Lazenby	" "	2640	225 00
	S. C. Derby	" "	2641	225 00
	R. D. Bohannon	" "	2642	225 00
	W. T. Magruder	" "	2643	225 00
	J. P. Gordy	" "	2644	225 00
	W. H. Scott	" "	2644	225 00
	B. F. Thomas	" "	2646	225 00
	J. V. Denney	" "	2647	225 00
	B. L. Bowen	" "	2648	225 00
	D. S. Kellicott	" "	2649	225 00
	A. L. Williston	" "	2650	225 00
	Thos. F. Hunt	" "	2651	250 00
	N. W. Lord	" "	2652	200 00
29	G W. Kauffman	" "	2653	200 00
	W. McPherson	" "	2654	200 00
	F. A. Ray	" "	2655	200 00
	Edw. Orton, Jr.	" "	2656	180 00
	J. W. Bradford	" "	2657	180 00

STATEMENT No. II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 29	G. W. McCoard	1/10 salary January inst., 1898	2658	$160 00
	H. C. Lord	" "	2659	150 00
	E. A. Hitchcock	" "	2660	150 00
	W. D. Gibbs	" "	2661	140 00
	P. G. Bowman	" "	2662	140 00
	F. C. Caldwell	" "	2663	140 00
	D. S. White	" "	2664	140 00
	S. A. Norton	" "	2665	120 00
	R. I. Fulton	" "	2666	120 00
	Olive Jones	" "	2667	120 00
	J. E. Boyd	" "	2668	110 00
	C. E. Sherman	" "	2669	100 00
	T. E. French	" "	2670	100 00
	C. W. Meshoh	" "	2671	100 00
	F. C. Clark	" "	2672	100 00
	W. H. Siebert	" "	2673	100 00
	A. W. Hodgman	" "	2674	100 00
	J. R. Taylor	" "	2675	100 00
	J. A. Bownocker	" "	2676	90 00
	W. A. Knight	" "	2677	90 00
	C. W. Weick	" "	2678	90 00
	C. C. Sleffel	" "	2679	90 00
	C. W. Foulk	" "	2680	85 00
	C. L. Arnold	" "	2681	85 00
	K. D. Swartzel	" "	2682	85 00
	C. A. Dye	" "	2683	85 00
	J. S. Hine	" "	2684	85 00
	J. H. Schaffner	" "	2685	80 00
	C. Wissler	" "	2686	80 00
	W. L. Graves	" "	2687	80 00
	C. A. Bruce	" "	2688	80 00
	C. W. Burkett	" "	2689	75 00
	W. F. Lavery	" "	2690	70 00
	F. Haas	" "	2691	70 00
	E. E. Harrold	" "	2692	70 00
	A. E. Vinson	" "	2693	65 00
	F. L. Landacre	" "	2694	65 00
	E. M. VanHarlingen	" "	2695	60 00
	F. K. Lewis	" "	2696	60 00
	Harriet Townshend	" "	2697	55 00
	F. E. Kester	" "	2698	55 00
	Maude Jeffrey	" "	2699	50 00
	Gertrude Kellicott	" "	2700	50 00
	J. T Martin	" "	2701	40 00
	J. R. Spurrier	" "	2702	35 00
	H. W Kuhn	" "	2703	30 00
	Horace Judd	" "	2704	30 00
	J. H. Fox	" "	2705	30 00
	C. T. Morris	" "	2706	30 00
	J. F. Cunningham	" "	2707	30 00
	J. G. Boyd	" "	2708	25 00
	C. B. Frederick	" "	2709	25 00
	Robt. Fischer	" "	2710	20 00
	F. O. Clements	" "	2711	20 00
	A. V. Bleininger	" "	2712	20 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Jan. 29	W. F. Hunter	1/10 salary January inst., 1898	2713	$250 00
	W. H. Page	" "	2714	100 00
	E. B. Kinkead	" "	2715	100 00
	D. F. Pugh	" "	2716	70 00
	E. O. Randall	" "	2717	65 00
	J. P. Jones	" "	2718	35 00
	G. W. Knight	" "	2719	25 00
	F. F. D. Albery	" "	2720	15 00
	J. H. Collins	" "	2721	10 00
	J. H. Canfield	Salary for January, 1898	2722	500 00
	Alexis Cope	" " "	2723	187 50
	W. C. McCracken	" " "	2724	125 00
	Jean Blackford	" " "	2725	50 00
	Edith Cockins	" " "	2726	54 17
	C. B. Hine	" " "	2727	50 00
	C. Low	" " "	2728	54 17
	Wm. Standley	" " "	2729	45 00
	Benj. LeBay	" " "	2730	45 00
	G. R. Rose	" " "	2731	65 00
	J. H. Brown	" " "	2732	45 00
	Jas. Kelly	" " "	2733	41 67
	F. B. Brewer	" " "	2734	40 00
	Jno. Adams	" " "	2735	40 00
	Jno. Conrad	" " "	2736	40 00
	C. Loveberry	" " "	2737	25 00
	Edw. Stalter	" " "	2738	20 00
	Wm. Weir	" " "	2739	20 00
	Wm. R. Beattie	" " "	2740	54 17
	A. Chantler	" " "	2741	45 00
	W. Whitestine	" " "	2742	45 00
	Wash Townshend	" " "	2743	30 00
	F. W. Prentiss	" " "	2744	33 33
	C. Riddle	" " "	2745	20 00
	O. A. Davis	" " "	2746	10 00
	W. E. Chappel	" " "	2747	10 00
	H. Gamper	" " "	2748	10 00
	K. Nurian	" " "	2749	10 00
	E. B Somermeier	" " "	2750	10 00
	C. P. Linhart	" " "	2751	160 00
	Stella Elliott	" " "	2752	60 00
	M. N. Cook	" " "	2753	40 00
	Mary H. Cope	" " "	2754	40 00
	H. J. Noyes	" " "	2755	166 66
	J. A. Thompson	" " "	2753	13 50
	M. Dresback	1/10 salary January inst., 1898	2757	30 00
	Theo. Griffin	" "	2758	40 00
	B. F Slocum	63 hrs. work @ 15c	2759	9 45
	Jno. Thissan	8 hrs. work @ 45c	2760	3 60
31	F. M. Senter P. M.	500 2c, 250 1c stamps	2761	12 50
Feb. 2	Caldwell & Iseminger	Mill work and lumber	2762	551 84
	T. J. Dundon & Co.	Lumber	2763	144 58
	Pedrick & Ferris	Mortar	2764	17 50
	C. Durner	Sharpening tools	2765	3 03
	Orr, Brown & Price	Muriatic acid	2766	2 28
	A. Wagner	Use hoisting engine	2767	48 89

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 2	H. Haerlein	Services as landscape gardn'r		
	P. T. Hord	75 hrs. elect. wk. @ 10c	2768	$ 17 20
	Cols. Plate and Window Glass Co	1 German mirror	2769	7 50
			2770	1 70
	Cols. Sewer Pipe Co	1 4x4	2771	14
	Crosby Steam, G. & V. Co	Water gauge	2772	77 65
	W. T. Magruder	Express charges paid	2773	80
	P. Hayden S. Hdw. Co	Iron	2774	18
	Tallmadge Hdw. Co	Hardware	2775	6 63
	Nitschke Bros.	5 sheets cardboard	2776	25
	Cols. Supply Co	Pipe fittings	2777	15 34
	Schaffer & Budenburg	Water gauge	2778	8 13
	F. Charles	Hauling	2779	1 26
	Metni Metal Works	1 meter, etc	2780	15 00
	A. F. Hall	1 month's labor	2781	60 00
	H. Cole & Co	Paragon paper, etc	8782	1 60
	F. J. Hale	1½ hours @ 19c	2783	23
	E. H. Bailey	76½ " 15c	2784	11 48
	J. Kane	234 " 12½c	2785	29 25
	C. J. Morrow	5 " 12½c	2786	63
	M. Cook	10 " 12½c	2787	1 25
	Seraphim Bl'k Book Co.	Book binding	2788	101 30
	Burrows Bros. Co	Books	2789	77 45
	Cleve. Public Library	Cumulative Index to "Per"	2790	15 00
	Power Pub. Co	5 copies "Power"	2791	50
	McClelland & Co	Ink	2792	1 00
	H. H. Ballard	2 boxes clips	2793	1 00
	W. S. Wiggins	Stamps	2794	90
	Boston Book Co	Books	2795	2 43
	W. S. Houghton	2 sets McClure's and Scribner's	2796	13 00
	Lemcke & Buechner	1 book	2797	53
	W. T. Porter	Sub. vol. 1, Am. Journal Physiology	2798	5 00
	A. H. Smythe	Stencil paper	2799	1 00
	G. E. Stechert	Books	2800	667 84
	C. E. Williams	Casting for engine	2801	7 36
	Ohio Pipe Co	Threshold	2802	1 05
	M. J. Bergin Lum. Co	Lumber	2803	1 20
	A. F. Wilcox	62 hours grading @ 15c	2804	9 45
	D. K. Starbuck	91 " @ 10c less 9c	2805	9 01
	R. E. McIntosh	128 " 12½c "	2806	15 91
	J. R. Spurrier	123½ " elect. wk. @ 20c	2807	24 70
	R. R. Dunlap	73½ " @ 10c	2808	7 35
	E. G. Webster	116¼ " elect. wk. @ 12½c	2809	14 44
	O. A. Davis	245¾ " work	2810	42 61
	E. E. Graham	Elect. plant work	2811	9 08
	L. B. Powell	" "	2812	10 11
	M. C. Hunter	" "	2813	3 77
	A. E. Loeb	" "	2814	20 47
	L. R. Krumm	68½ hours work @ 10c	2815	6 85
	H. S. Green	33½ " "	2816	3 35
	E. J. McNamara	Gas fitting	2817	90 00
	Robt. Butterworth	54¼ hours work @ 10c	2818	5 23
	Jas. Clark	Plastering	2819	295 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amo
1898.				
Feb. 2	Brown Mfg. Co	Wagon tires, etc	2820	8
	Cap. City Mch. Works	Wire racks, etc	2821	2
	Bradley, Munk & Co	Milk cans	2822	
	A. H. Reid	Milk bottles	2823	
	Wm. Burdell	Harness	2824	3
	Champlin Ptg. Co	1000 students reports in butter making	2825	
	India Alkali Works	1 keg savogran	2826	
	Hann & Adair	1,500 pcs 20 pound H. B	2827	
	L. C. R. Baldwin	62 hours in dairy lab. at 15c	2828	
	F. S. Johnston	145 hours cler. work at 12½c	2829	1
	A. F. Wilcox	44 hours work at 15c	2830	
	N. F. Pheneger	Milk	2831	34
	E. S. Ream	22 hours camp work at 12½c	2832	
	J. C. Britton	71 hours work at 15c	2833	1
	J. A. Thompson	18 " 12½c	2834	
	A. F. Wilcox	108 " 15c	2835	1
	C. H. Clevenger	15 " 12½c	2836	
	Champlin Ptg. Co	Blanks, cards, etc	2837	3
	W. D. Hoard Co	Advertising	2838	1
	O. T. Corson	"	2839	2
	Press Post Ptg. Co	"	2840	
	O. S. Journal Co	"	2841	
	Phelps Publishing Co	"	2842	
	E. Cook & Bro	50 copies Cols. Dispatch	2843	
	Baker & Co	Platinum wire, etc	2844	6
	Blackwood, Green & Co	Repairing copper ovens	3845	
	Rochester Opt. Co	Instruments	2846	3
	Champlin Ptg. Co	Labels	2847	
	Eimer & Amend	1 yard pressure tubing	2848	
	Kimball & Matthews	Chem. supplies	2849	1
	W. B. Calkins	Work in store room	2850	3
	N. P. Oglesby	"	2851	1
	Kauffman, Lattimer Co	Drugs and chemicals	2852	97
	W. D. Griffith	6½ days at $1.50	2853	
	Thos. Algeo	33 days, 6 hours at $1.50	2854	5
	M. Peck	31 " at $1 50	2855	4
	Thos. Boude	31 " $1.50	2856	4
	J. Stainbrook	28½ " $1.50	2857	4
	J. Garretson	25 " $1.50	2858	3
	H. Chantler	7 " $1.50	2859	1
	Chas. Pixler	26 " $1.50	2860	3
	W. E. Case	29 " $1.50	2861	4
	Ohio Furn. Co	2 wood stools	2862	
	F. L. Estep	4 hours work at 15c	2863	
	L. R. Krumm	4½ " 10c	2864	
	W. E. Chappell	87 " 15c	2865	1
	J. L. Trauger	Making paper files	2866	
	Tallmadge Hdw. Co	Bolts, hooks, etc	2867	
	D. S. White	Halter, etc	2868	
	C. B. Fredericks	Mounting cow's skeleton	2869	2
	McAllister, Mohler & Co	Furniture	2870	3
	Detchon & Sparhawk	Feed	2871	1
	H. Braun, Sons & Co	Anti-toxine, etc	2872	2
	Ohio State Journal Co	Advertising	2873	

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 2	Tallmadge Hdw. Co	1 scoop	2874	$1 00
	G. E. Stechert	Books	2875	31 00
	M. A. Seed Dry Plate Co	Plates	2876	2 52
	Kimball & Mathews	Photo material	2877	6 07
	McClelland & Co	Stationery	2878	2 20
	F. D. Cope	7 days reg. students @ $1.50	2879	10 50
	E. B. Voorhees, Treas	Membership in A. A. C. A.	2880	10 00
	W. U. Telegraph Co	Messages	2881	54
	Ruggles Gale Co	1 file	2882	2 00
	W. S. Orvis	Carbon paper, etc	2883	65
	E. O. Vaile	1 Directory, Ohio	2884	1 00
	M. J. Bergin Lumb. Co	1 load saw dust	2885	2 00
	Tracy-Wells Co	Brooms, pails, etc	2886	18 07
	Webb Stat'ry & Ptg. Co	Drawer partitions	2887	2 00
	India Alkali Works	1 barrel savogran	2888	19 50
	Standard Oil Co	Oils	2889	40 29
	Oscar S. Lear	Ink	2890	90
	M. Armbruster & Sons	Removing scenery	2891	6 00
	Am. Dist. Teleg. Co	Rent, fire alarm box	2892	2 50
	Yale & T. Mfg. Co	Latches and keys	2893	24 30
	W Ramsey	Laundrying towels	2894	72
	Mrs. Myers	Washing towels	2895	66
	F. F. Bonnet	1 clock	2896	5 00
	D. C. Huddleson	Work in Ex. office, etc	2897	2 17
	F. R. West	94 hours guide work @ 12½c	2898	11 75
	R. J Seymour	Guide work, etc	2899	10 12
	E. G. Oberlin	15 hours guide work @ 12½c	2900	1 87
	F. C. McKinney	18 " "	2901	2 25
	Annis McLaughlin	39 hours office work	2902	5 85
	C. E. Barnet	2 days work @ $2	2903	4 00
3	W. E. Chappell	Elect. work	2904	5 43
	Blackwood, Green & Co	Chimney stacks, iron, etc	2905	69 87
	Payne McD. Hdw. Co	Hardware	2906	13 35
	L. S. Wells	Wall paper and hanging	2907	6 22
	W. B. Kirkpatrick	63½ hours elect. work @ 12½c	2908	7 94
	Alexis Cope	Expenses paid Evans case	2909	42 00
	Westinghouse Elec. Co	Watt meters	2910	136 00
	A. S. W. Huffman	Plumbing	2911	300 00
	Wm. Caldwell	Gun cases	2912	1,000 00
	Kilbourne Jones Co	Scales	2913	31 20
	Krauss, Butler & B. Co	2 rugs, etc	2914	22 20
	McAllister & Mohler Co	Furniture	2915	55 03
	J. King Opt. Co	1 set test type, etc	2916	5 64
	Murray City Coal Co	Coal	2917	1,898 09
	Robbins & Co	Linen duck, etc	2918	2 70
	D. C. Beggs Co	Shades	2919	29 00
	Columbus Brass Co	Nipples	2920	60
	Capital City Mch. Wks	Plates, washers and appliances	2921	114 10
	Cass Harkins	1 engine	2922	250 00
	Col. Wire & Iron Works	1 wire mat	2923	5 25
	F. G. Howald & Co	Furniture	2924	48 00
	Library Bureau	6 labels	2925	81 00
	Kinkade & Liggett	Angles, etc	2926	5 50
	M. C. Lilley & Co	1 reading desk	2927	11 75

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 3	Howe Scale Co	1 grain tester	2928	$12 50
	Cornish C. & G. Mfg.Co	Dairy apparatus	2929	48 65
	Blackwood, Green & Co	Galv iron, flower pots	2930	87 68
	Vt. Farm Mch. Co	Dairy apparatus	2931	191 15
	M. & L. E. Gurley	1 anemometer	2932	16 80
	A. H. Reid	Dairy apparatus	2933	102 52
	McAllister, Moher &Co.	Office furniture	2934	302 17
	Col. Cabinet Co	Furniture	2935	245 75
	A. H. Barber & Co	Ice machine, etc	2936	1,054 46
	H. Chantler	Help installing ice machine	2937	19 00
	E. S. Ream	30 hours work @ 12½c	2938	3 75
	C. H. Clevenger	25 " "	2939	3 13
	J. A. Thompson	12 " "	2940	1 50
	C. L. Sackett	10 " "	2941	1 25
	C. W. Mooney	39 " @ 15c	2942	5 85
	H. L. Belden	109 " @ 12½c	2943	13 63
	W. Gilmore	55 " "	2944	6 88
	J. C. Perry	81 " "	2945	10 13
	D. M. Massie	Expense trustee from Nov. 9 to date	2946	15 70
	G. B. Schulte Sons &Co	Bals	2947	8 77
	H. Cole & Co	B. P. Paper	2948	1 00
	E. A. Kinsey Co	Brass rods, etc	2949	17 56
	Kelton & Converse	Lumber	2950	84 41
	Hanna Pt. Mfg. Co	Shellac	2951	90
	Col. Gas Co	Coke	2952	7 25
	F. Charles	Hauling	2953	2 50
	Tallmadge Hdw. Co	Hardware	2954	25 52
	Kinkade & Liggett	Angle steel	2955	2 00
	Crosby St. Gauge Co	1 gage	2956	3 60
	Griswold Sohl Co	Iron	2957	3 80
	McClelland & Co	6 files	2958	1 35
	Col. Supply Co	Pipe, etc	2959	1 92
	Clev. Twist Drill Co	Drills, etc	2960	1 38
	Blackwood Green & Co.	Pipe	2961	9 56
	W. Erdman	85½ hours work @ 17½c	2962	14 96
	J. H. Nold	94 " 15c	2963	14 10
	J. H. Lesh	29 " 15c	2964	4 35
	G. Leinbaugh	10½ " in mch. shops.	2965	1 57
	W. Erdman	11 " @ 17½c	2966	1 93
	I. H. Lesh	20⅛ " @ 15c	2967	3 03
	E. H. Bailey	72½ " "	2968	10 87
	J. H. Nold	122 " "	2969	18 37
	Flood & Vincent	1 book	2970	1 00
	Macmillan Co	Books	2971	5 12
	Miss C. C. Koehl	Photos	2972	3 75
	Chic. Lab. Sup & Sc. Co	1 mercury commentator	2973	4 50
	Bissell, Dodge & E. C.	Elect. supplies	2974	13 77
	L. S. Wells	Books	2975	12 00
	Burrows Bros. Co	"	2976	3 50
	Richards & Co	Microscopes, etc	2977	87 25
	D. S. Kellicott	Lab. supplies	2978	10 58
	Jas. Seaman	24 insect cases	2879	31 20
	Col. Gas Co	Coke	2980	14 50
	N. W. Lord	Cash paid for gas	2981	4 05

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 3	L. T. Williams	Work in library	2982	89 75
	Lucy Allen	88 hours work @ 12½c	2983	11 00
	Inland Pub. Co	1 book	2984	86
	Chas. Scribner's Sons	Books	2985	2 26
	Spahr & Glenn	Exam. questions	2986	12 00
	D. C. Huddleson	Office work	2987	4 60
	A. McLaughlin	"	2988	10 00
	Edw. Orton	Fossil skull	2989	50 00
	L. C. Riddle	35 hours work @ 15c	2990	5 25
	Bissell, Dodge & E. Co.	Knives, plugs, etc	2991	4 91
	Lincoln Elect. Co	Dynamo, etc	2992	45 00
	West. Electric Co	Electric appliances	2993	30 24
	Payne McD. Hdw. Co	Hardware	2994	80
	Penna. Fuel Co	Coal	2995	2 10
	J. J. Murray & Co	Electric appliances	2996	12 23
	G. D. Freeman	Electric work	2997	5 25
	C. R. Stauffer	8½ hrs. elec. work @ 10c	2998	85
	Champlin Ptg. Co	Envelopes, etc	2999	38 50
	R. R. Johnston	Banquet at armory	3000	215 62
	W. R. Beattie	Carnations, etc	3001	2 95
	Hager & Graves	Groceries	3002	40 73
	H. Braun Sons & Co	Scale and weight	3003	2 50
	Kilbourne-Jones Co	Scale	3004	3 00
	A. W. Livingston's Sons	Seeds, etc.	3005	2 85
	J. M & W. Westwater	Vases, teapot, etc	3006	6 19
	Logan McCormick	4 doz. mounts	3007	3 84
	J. W. Bradford	Lab. supplies	3008	3 15
	B. F. Wissler	Circulars	3009	10 85
	J. P. Gordy	Exp. charges paid	3010	35
	F. C. Caldwell	4 mo. Supt. elect. plant	3011	100 00
	Tallmadge Hdw Co	Hardware	3012	7 40
	Blackwood G. & Co	Brushes, etc	3013	64 30
	Schoedinger, Fearn&Co	Hardware	3014	20 12
	Engelke & Bigelow	Hauling	3015	36 00
	Ruggles Gale Co	Stationery	3016	2 75
	J. W. Coulson & Co	Painting and glazing	3017	996 45
	R. A. McClure	Mill work	3018	359 47
	Champion Iron Co	Ornamental and structural iron	3019	879 12
	Acme Paving Co	Cement work	3020	446 37
	W. Taylor Man. & G. Co	Mill work	3021	637 50
	Fitzpatrick & Hoepfner	Plumbing, etc	3022	400 00
	Shilling Foundry Co	Box casting	3023	2 52
	Post-Glover Elec. Co	Spec. clusters, etc	3024	19 91
	Central Elec. Co	Electric supplies	3025	73 50
	J. M. & W. Westwater	Pendents, etc	3026	306 12
	Col. Ed. E. Light Co	Lamps	3027	201 50
	Schoedinger, Fearn&Co	Hardware	3028	18 78
	Col. Supply Co	Pipe and fittings	3029	40 24
	Stitt, Price & Co	Cement	3030	3 00
	Bissell, Dodge & E. Co.	Electric supplies	3031	58 46
	Yost & Packard	Services as architects	3032	449 53
	Schoedinger, Fearn&Co	Hardware	3033	2 35
	Hann & Adair	Cards, envelopes, etc	3034	10 95
	Tallmadge Hdw. Co	Hardware	3035	15 34

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 3	Kelton & Converse	Lumber	3036	$34 18
	Engelke & Bigelow	Freight hauling	3037	71 18
	Keasby & Mattison Co.	Magnesia covering	3038	1,855 39
	J. B. Colt & Co.	2 lamps	3039	22 50
	A. T. Kasley	Elec. work	3040	5 44
	C. E. Lee	"	3041	11 71
	Elec. Appliance Co.	Elec. supplies	3042	40 78
	General Elec. Co.	"	3043	161 44
	A. D. Morley	Carpenter work	3044	10 75
	John Cain	Elec. work	3045	2 15
	Peters, Burns & Pretz'r	Services as architects	3046	500 00
	John Hertner	Elec. work	3047	4 78
	J. H. Randall	Carpenter work	3048	25 00
	C. H. Woodruff	"	3049	62 34
	M. Staley	Elec. work	3050	4 11
	C. H. Crumley	"	3051	3 86
	M. G. Blose	"	3052	6 31
4	Maggie Zimmerman	Service department domestic science	3053	3 00
	H. E. Kennedy, supt.	Expenses as trustees	3054	27 80
5	L. B. Wing	Pay roll	3055	519 85
	Clarence Loveberry	On account salary	3056	4 17
	L. Williams	5 hrs. watchman @ 15c	3057	75
June 20	Columbus Gas Co.	Gas for January, 1898	3058	125 03
Feb. 10	M. Zimmerman	1 week dep. dom. science	3059	3 00
	H. E Kennedy supt.	Salary 1 month	3060	356 00
17	Maggie Zimmerman	1 week dep. dom. science	3061	3 00
18	C. L. Wattering	Hauling	3062	10 98
19	H. E. Kennedy, supt.	Pay roll	3063	609 40
23	Steve Neth	Carpenter work	3064	6 75
24	O. W. Lehman	"	3065	11 25
	M. Zimmerman	1 week dept. dom. science	3066	3 00
26	Thos. F. Hunt	½ salary February inst, 1898	3067	250 00
	H. A. Weber	" "	3068	225 00
	A. M. Bleile	" "	3069	225 00
	W. A. Kellerman	" "	3070	225 00
	C. N. Brown	" "	3071	225 00
	A. C. Barrows	" "	3072	225 00
	Edw. Orton	" "	3073	225 00
	E. A. Eggers	" "	3074	225 00
	J. R. Smith	" "	3075	225 00
	G. W. Knight	" "	3076	225 00
	W. R. Lazenby	" "	3077	225 00
	S. C. Derby	" "	3078	225 00
	R. D. Bohannon	" "	3079	225 00
	W. T. Magruder	" "	3080	225 00
	J. P. Gordy	" "	3081	225 00
	W. H. Scott	" "	3082	225 00
	B. F. Thomas	" "	3083	225 00
	J. V. Denney	" "	3084	225 00
	B. L. Bowen	" "	3085	225 00
	D. S. Kellicott	" "	3086	225 00
	A. L. Williston	" "	3087	225 00
	N. W. Lord	" "	3088	200 00
	G. B. Kauffman	" "	3089	200 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 26	W. McPherson	1/10 sal. Feb. inst., 1898	3090	$200 00
	F. A. Ray	" "	3091	200 00
	Edw. Orton, Jr.	" "	3092	180 00
	J. N. Bradford	" "	3093	180 00
	G. W. McCoard	" "	3094	160 00
	C. P. Linhart	" "	3095	160 00
	H. C. Lord	" "	3096	150 00
	E. A. Hitchcock	" "	3097	150 00
	W. D. Gibbs	" "	3098	140 00
	P. G. Bowman	" "	3099	140 00
	F. C. Caldwell	" "	3100	140 00
	D. S. White	" "	3101	140 00
	S. A. Norton	" "	3102	120 00
	R. I. Fulton	" "	3103	120 00
	Olive Jones	" "	3104	120 00
	J. E. Boyd	" "	3105	110 00
	C. E. Sherman	" "	3106	100 00
	T. E. French	" "	3107	100 00
	C. W. Mesloh	" "	3108	100 00
	F. C. Clark	" "	3109	100 00
	W. H. Siebert	" "	3110	100 00
	A. W. Hodgman	" "	3111	100 00
	J. R. Taylor	" "	3112	100 00
	J. A. Bownocker	" "	3113	90 00
	W. A. Knight	" "	3114	90 00
	C. W. Weick	" "	3115	90 00
	C. C. Sleffel	" "	3116	90 00
	C. W. Foulk	" "	3117	85 00
	C. L. Arnold	" "	3118	85 00
	K. D. Swartzel	" "	3119	85 00
	C. A. Dye	" "	3120	85 00
	J. S. Hine	" "	3121	85 00
	J. H. Schaffner	" "	3122	80 00
	C. Wissler	" "	3123	80 00
	W. L. Graves	" "	3124	80 00
	C. A. Bruce	" "	3125	80 00
	C. W. Burkett	" "	3126	75 00
	W. F. Lavery	" "	3127	70 00
	F. Haas	" "	3128	70 00
	E. E. Harrold	" "	3129	70 00
	A. E. Vinson	" "	3130	65 00
	F. L. Landacre	" "	3131	65 00
	E. M. VanHarlingen	" "	3132	60 00
	T. K. Lewis	" "	3133	60 00
	Stella Elliott	" "	3134	60 00
	H. Townshend	" "	3135	55 00
	F. F. Kester	" "	3136	55 00
	Maude Jeffrey	" "	3137	50 00
	Gertrude Kellicott	"	3138	50 00
	Thedore G iffin	" "	3139	40 00
	J. T. Martin	" "	3140	40 00
	J. R. Spurrier	" "	3141	35 00
	M. Dresbach	" "	3142	30 00
	H. W. Kuhn	" "	3143	30 00
	H. Judd	" "	3144	30 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Feb. 26	J. H. Fox	1/10 salary Feb. inst., 1898	3145	$30 00
	C. T. Morris	" "	3146	30 00
	J. F. Cunningham	" "	3147	30 00
	J. G. Boyd	" "	3148	25 00
	C. B. Frederick	" "	3149	25 00
	C. Riddle	" "	3150	20 00
	R. Fischer	" "	3151	20 00
	F. O. Clements	" "	3152	20 00
	A. V. Bleininger	" "	3153	20 00
	J. A. Thompson	" "	3154	13 50
	O. A. Davis	" "	3155	10 00
	W. E. Chappell	" "	3156	10 00
	H. Gamper	" "	3157	10 00
	K. Nurian	" "	3158	10 00
	E. E. Somermeier	" "	3159	10 00
	W. F. Hunter	" "	3160	250 00
	W. H. Page	" "	3161	100 00
	E B. Kinkead	" "	3162	100 00
	D. F. Pugh	" "	3163	70 65
	E. O. Randall	" "	3164	65 00
	Paul Jones	" "	3165	35 00
	G. W. Knight	" "	3166	25 00
	F. F. D. Albery	" "	3167	15 00
	J. H. Collins	" "	3168	10 00
	J. H. Canfield	Salary for Feb., 1898	3169	500 00
	Alexis Cope	" "	3170	187 50
	W. C. McCracken	" "	3171	125 00
	G. R. Rose	" "	3172	65 00
	W. R Beattie	" "	3173	54 17
	Edith Cockins	" "	3174	54 17
	Chas. Low	" "	3175	54 17
	Jean Blackford	" "	3176	50 00
	C. B. Hine	" "	3177	50 00
	Mary H. Cope	" "	3178	50 00
	A. Chantler	" "	3179	45 00
	Wm. Stanley	" "	3180	45 00
	B Le Bay	" "	3181	45 00
	H. Martz	" "	3182	45 00
	Jas. Kelly	" "	3183	41 67
	J. H. Brown	" "	3184	40 00
	M N. Cook	" "	3185	40 00
	W. Whitestine	" "	3186	40 00
	D. D. Geren	" "	3187	40 00
	F. B. Brewer	" "	3188	40 00
	J. E. Adams	" "	3189	40 00
	Jno. Conrad	" "	3190	40 00
	F. W. Prentiss	" "	3191	33 33
	Wash. Townsend	" "	3192	30 00
	Edw Stalter	" "	3193	20 00
	Wm. Weir	" "	3194	20 00
	H. J. Noyes	" "	3195	166 66
	T. W. Broomhall	" "	3196	13 50
	F. M. Senter, P. M.	600 1c., 500 2c., 10 special delivery stamps	3197	17 00
	Col. St. Ry. Co	Car tickets	3198	5 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1897.				
Feb. 26.	D. D. Geren	Bal. Jan. 12 to 31, Janitor	3199	$23 33
Mar. 1	Mike Geary	3 hrs. carp. work (@ 25c	3200	9 00
2	R. R. Bowker	1 Am. and Eng. catalogue	3201	5 00
	Library Bureau	—— chairs, etc	3202	107 60
	Ginn & Co	Books	3203	2 00
	Natl. Ed. Association	Proceedings	3204	34 00
	W. S. Wiggins	5 stamps	3205	1 25
	Spahr & Gleun	Ptg. cards, record sheets	3206	40 25
	Burrows Bros. Co	Books, etc	3207	177 43
	G. E. Stechert	"	3208	150 56
	F. J. Olson	Classification lists	3209	30 35
	West Pub. Co	Books	3210	69 75
	Keiton & Converse	Lumber	3211	4 18
	Col. Supply Co	Fittings and pipe	3212	89 62
	Cap. City Mch. Works	Fittings and machine work	3213	49 73
	McAllister, Mohler & Co	Chairs, desks, etc	3214	94 50
	Tallmadge Hdw. Co	Hardware	3215	30 92
	Cap. City Mch. Works	White waste, etc	3216	30 01
	Tracy-Wells Co	Brooms, brushes, etc	3217	11 93
	A. S. W. Huffman	Est. No. 29, plumbing	3218	1,000 00
	Schoeding'r, Fearn & Co	Hardware	3219	5 38
	Col. Ed. Elec. Lt. Co	15 carbons	3220	60
	Std. Underg'd Cable Co.	Covers	3221	79 00
	Bissel, Dodge & E. Co	Hardware and supplies, elect.	3222	72 49
	Nitschke Bros	Letter heads, cards, etc	3223	12 27
	Hann & Adair	Printing, stationery, etc	3224	18 95
	Cheringt'n Ptg. & En. Co	2 rubber stamps, etc	3225	2 70
	F. Schoedinger	Iron, etc	3226	2 30
	Engelke & Bigelow	Freight and cartage	3227	82 51
	T. J. Dundon	Lumber	3228	5 22
	The Kip Binder	Box klips	3229	1 50
	Blackwood, Green & Co	Hdw. and galv. iron work	3230	54 18
	Cen. Elect. Co	Elect. supplies	3231	14 90
	Marcellus Staley	44½ hours work @ 10c	3232	4 45
	E. E. Graham	23½ " " 12½c	3233	3 46
	C. E. Lee	49 " " 12½c	3234	5 94
	L. R. Krumm	29 " " 10c., 4 hours @ 12½c	3235	3 40
	C. H. Crumley	16¾ hours work @ 10c	3236	1 67
	J. H. Randall	89 " " $2.50	3237	22 25
	C. H. Woodruff	Carpenter work	3238	74 70
	Babcock & Wilcox Co	12 16-tubes (@ 4$	3239	48 00
	H. Braun Sons & Co	Lard oil, lead; etc	3240	4 20
	Hanna Paint Mfg. Co	Paint, etc	3241	2 10
	A. S. W. Huffman	Syphon bowl, etc	3242	8 95
	C. A. Oare	Repairing chimneys, etc.	3243	31 90
	H. Chantler	13 days' work @ $1.50	3244	19 50
	Col Coal & Lime Co	1 barrel lime cement	3245	2 50
	Geo. Tiemann	2 dynamometers	3246	51 00
	Col. Wire and Iron Wks	Wire matting	3247	7 00
	Void		3248	
	Narragansett Mch Co	Equipment gymnasium	3249	63 15
	Tracy-Wells Co	Brushes	3250	7 50
	D. C. Beggs & Co	Screens and rug	3251	25 35
	A. G. Spalding & Bro	Gymnasium equipment	3252	747 21

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Mar. 2	Standard Oil Co	Oils	3253	$28 10
	Webb Sta. & Ptg. Co	Office supplies	3254	5 85
	Postal Telegraph Co	Messages	3255	54
	E. S. Johnson	21 hrs. wk. @ 10c	3256	2 10
	Robt. Butterworth	20¼ "	3257	2 03
	J. McLain Smith	Exp. meeting March 2, 1898	3258	6 70
	Am. Dist. Teleg. Co	Message service	3259	55
	C. O. Paper Co	Paper	3260	20 50
	E. Cook & Bro.	50 copies Dispatch	3261	1 50
	L. B. Powell	21 hrs. wk. @ 10c	3262	2 10
	D. K. Starbuck	39½ "	3263	3 95
	C. R. Stauffer	37 "	3264	3 70
	Fkl. Typewriter Agcy	Ribbon	3265	75
	W. S. Orvis	Ink, muc., paper, etc	3266	2 39
	C. O. Oil Co	1 bbl. oil	3267	9 97
	W. U. Teleg. Co	Messages	3268	8 95
	Col. Transfer Co	Carriage service	3269	4 50
	D. C. Beggs Co	Screens loaned	3270	5 25
	H. Powell	32 hrs. work	3271	4 80
	A. McLaughlin	3 "	3 72	1 20
	E. G. Oberlin	62 hrs. as guide, etc	3273	7 75
	C. E. Barnet	Amanuensis work	3274	4 50
	R. J. Seymour	24 hrs. guide, etc	3275	3 00
	F. C. McKinney	73 "	3276	9 12
	F. R. West	84 "	3277	10 50
	Champlin Ptg. Co	Booklets, reports, etc	3278	30 85
	Ohio S. S. & C. Eng	Advertising	3279	10 00
	Agr. Std. Pub. Co	375 copies Feb. issue	3280	18 75
	Westbote Co	Ptg. exam. questions, etc	3281	5 75
	Murray City Coal Co	Coal del. in Feb., 1898	3282	910 59
	O. A. Davis	208¾ hrs wk. @ 17½c, and 3½ hrs. @ 9c., elec. plant	3283	36 26
	W. B. Kirkpatrick	212 hrs. wk. @ 12½c. and 1⅛ hrs. @ 9c., elec plant	3284	26 41
	A. E. Loeb	77 hrs. wk. @ 17½c. and 1½ hrs. @ 9c., elec. plant	3285	13 39
	E. G Webster	75¾ hrs. wk. @ 12½c	3286	9 47
	Jas. Stainbrook	25d as fireman @ $1.50	3287	37 50
	T. Boude	27d " "	3288	40 50
	M. Peck	28d in boiler room @ $1.50	3289	42 00
	Wm. Case	26d T. H. heating @ $1.50	3290	40 20
	W. Griffith	20d @ $1 50, janitor	3291	30 00
	T. Algeo	28½d @ $1.50, heating Bio. building	3292	42 75
	Joe. Garrettson	24d @ $1.50, helping plumber	3293	36 00
	Chas. Pixler	24½d @ $1.50, in boiler room	3294	36 75
	H. Cole & Co	Magnifying glass	3295	95
	F. Charles	Hauling	3296	1 25
	Brown & Sharp Mfg. Co	Metal can	3297	1 35
	Metni. Metal Co	Tin meter, etc	3298	6 04
	Lukenheimer Co	Regrinding globe valve	3299	33
	Schaffer & Budenberg	Thermometers	3300	11 60
	Hanna Paint Mfg. Co	Red lead	3301	3 80
	H. Judd	40 hrs. @ 25c	3302	10 00

STATEMENT II—Continued.

Date.	To whom made.	For what purpose.	No.	Amount.
1898.				
Mar. 2	C. E. Barnet	42½ hrs. @ 20c, as stenog	3303	$8 50
	C. J. Morrow	5 hours @ 12½	3304	38
	John Kane	164½ hrs. @ 12½c	3305	20 56
	E. H. Bailey	42½ hrs. @ 15c, mach. shop	3306	6 38
	A. F. Hall	1 mo. @ $60, as machinist	3307	60 00
	Hayden Sad. Hdw. Co	Hardware	3308	12 00
	Col. Gas Co	Coke	3309	25 22
	Barger Bros & Co	Material and labor rep. smoke stack	3310	4 38
	J. McAllister	Labor dep. ceramics	3311	51 45
	Edw. Orton, Jr.	Bill paid bricklayer	3312	4 50
	Sells Vehicle Co	Sprocket locks and postage	3313	1 90
	A. H. McIntyre	41½ hours work @ 10c electric plant	3314	4 15
	M. C. Hunter	32¾ hours work @ 10c electric plant	3315	3 28
	Cen. Ohio Paper Co	Paper	3316	3 60
	Oscar Erf	214 hours work @ 15c	3317	32 10
	Champlin Ptg. Co	Reports, score cards, etc	3318	12 50
	W. E. Chappell	24½ hours wk. @ 15c, car fares 30c, electric plant	3319	3 98
	F. S. Johnston	96 hours work @ 12½c	3320	12 09
	N. F. Pheneger	Milk	3321	151 43
	Warren Atkinson	18½ hours work @ 10c	3322	1 85
	P. Hayden S. Hdw. Co.	Hardware	3323	32 48
	H. Braun Sons & Co	10 lb charcoal	3324	1 00
	Jeffrey Mfg. Co	10½ pounds letheroid	3325	4 40
	E. H. Bailey	27½ hours work @ 15 cents in shops	3326	4 12
	J. H. Nold	106 hours work @ 15c in mach shops	3327	15 90
	F. Charles	Hauling iron and coke	3328	2 00
3	W. Erdman	82 hours work @ 17½c mach. shops	3329	14 35
	J. H. Lesh	55 hrs. work @ 15c light pt	3330	8 25
	D. C. Beggs Co	Rubber matting, etc	3331	30 41
	Hasbrook & Byers	Dishes, etc	3332	32 68
	Burrows Bros. Co	History of Banking	3333	21 60
	Col. Macadam Co	Crushed stone	3334	23 19
5	L. B. Wing	Expenses as trustee, Feb. 9th to March 3, 1898	3335	15 50
3	C. H. Clevenger	12 hrs. work @ 12½c on campus	3336	1 50
	H. L. Belden	13 hrs. labor @ 12½c "	3337	1 63
	A. F. Wilcox	34 hrs. work @ 15c "	3338	5 10
	J. F. Roberts	14 lessons to band	3339	28 00
	J. T. Martin	Cash paid as per attached bills	3340	2 11
	H. W. Pillow	3 cases rifles delivered	3341	1 00
	W. I. Chamberlain	Expenses meeting of trustees March 3, 1898	3342	16 35
	Bausch & Lomb Op. Co	Aluminum cell	3343	6 00
	Bruno Hessling	Plastic ornaments	3344	19 00
	R. Osboru	4 hours work @ 12½c in library	3345	50
	Lucy Allen	96 hrs. work @ 12½c in library	3346	12 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
March 3	L. T. Williams.....	9 nights work at 33½c and 60 hours at 12½c. in library...	3347	$10 50
	D. C. Heath & Co.....	Bruces "Sight Translations"..	3348	10 12
	H. E. Brown & Sons.....	Printing, etc.....	3349	12 81
	University Pub. Co.....	Book	3350	60
	Col. Rubber & Beltg. Co	Bushings, valve, etc.....	3351	84
	Ruggles-Gale Co.....	Postal scale, etc.....	3352	7 85
	Col. Cab. Co..	2 tables.....	3353	16 00
	M. G. Blose.....	63 hrs. wk. at 10c	3354	6 30
	Cap. City Mch. Works..	15 brackets.....	3355	90
	A. L. Baker.....	6 doz. $\frac{3}{10}$ balls.....	3356	1 50
	J. M. & W. Westwater...	Fittings and fixtures.....	3357	2 40
	Seraphim B. Book Co...	Making covers.....	3358	7 00
	Col. Gas Co.....	Gas used in February, 1898.....	3359	131 25
	E. A. Cole & Co.....	Smithing coal.....	3360	3 11
	B. R. Waight.....	Hobbles, etc.....	3361	40 00
	J. Hertner.....	57¼ hours at 10c.....	3362	5 72
	R. R. Dunlap.....	23½ hours at 10c.....	3363	2 35
	G. E Stechert.....	Book	3364	8 20
	J. L. Trauger.....	Binding books.....	3365	2 25
	L. Riddle.....	29 hrs. at 15c. bot. museum...	3366	4 35
	E. L. Fulmer.....	84½ " " ...	3367	12 67
	W. B. Calkins.....	98 " storeroom.....	3368	14 70
	N. P. Oglesby.....	46 " "	3369	6 90
	Riehle Bros.....	Fittings and test mch.....	3370	181 00
	E. M. Van Harlingen...	Laboratory supplies	3371	16 85
	Richards & Co.....	Slides, boxing, etc.....	3372	13 77
	Landon Ptg. & Pub. Co	Circulars, etc.....	3373	16 70
	Ohio Agr. Exp. Sta.....	600 pounds tankage, etc.....	3374	7 44
	John Cain.....	94¾ hrs. wk. at 10c.....	3375	9 30
	A. T. Kasely	16 hours work at 12½c., 42 hrs. at 15c.....	3376	8 30
	T. J. Godfrey.....	Expense meeting this day.....	3377	9 35
	M. Zimmerman.....	Serv. dept. dom. science.....	3378	3 00
	D. C. Huddleson.....	208 hrs. at 20.....	3379	41 60
	Grace Eagleson.....	21 hrs. at 20c.....	3380	4 20
	Hatton Bros.....	Supplies gymnasium	3381	5 60
	Champlin Ptg. Co.....	Printing cards, etc	3382	49 20
5	H. E. Kennedy, Supt.....	Pay roll, workmen.....	3383	294 05
	J. T. Mack.....	Ex. meeting, March 2, 3, 1898, tel. bill Jan. and Feb., 1898..	3384	25 63
7	H. Chantler.....	Janitor wk. lib., 14 d. at $1.50..	3385	21 00
	Lucy Allen.....	Salary for February, 1898.....	3386	20 00
10	H. E. Kennedy.....	Service Supt.....	3387	349 75
11	M. Zimmerman.....	Serv. dept. dom. science.....	3388	3 00
	W. B. Kirkpatrick.....	106¼ hours work at 12½c.....	3389	13 28
17	F. A. Burt.....	Recording Page deed.....	3390	2 00
	H. J. Noyes.....	Salary for March, 1898.....	3391	166 68
	M. Zimmerman.....	Ser. dept. dom. science	3392	3 00
19	H. E. Kennedy, Supt...	Pay roll, laborers this day.....	3393	214 35
20	T. F. Hunt.....	$\frac{1}{10}$ salary March inst., 1898.....	3394	250 00
	H. A. Weber.....	" "	3395	225 00
	A. M. Bleile.....	" "	3396	225 00
	W. A. Kellerman.....	" "	3397	225 00
	C. N. Brown.....	" "	3398	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Mar. 23	C. B. Fredericks	$\frac{1}{10}$ salary March inst., 1898	3399	$25 00
26	A. C. Barrows	" "	3400	225 00
	Edw. Orton	" "	3401	225 00
	E. A. Eggers	" "	3402	225 00
	J. R. Smith	" "	3403	225 00
	G. W. Knight	" "	3404	225 00
	E. A. Hitchcock	" "	3405	150 00
	W. R. Lazenby	" "	3406	225 00
	S. C. Derby	" "	3407	225 00
	R. D. Bohannan	" "	3408	225 00
	W. T. Magruder	" "	3409	225 00
	J. P. Gordy	" "	3410	225 00
	W. H. Scott	" "	3411	225 00
	B. F. Thomas	" "	3412	225 00
	J. V. Denney	" "	3413	225 00
	B. L. Bowen	" "	3414	225 00
	D. S. Kellicott	" "	3415	225 00
	A. L. Williston	" "	3416	225 00
	N. W. Lord	" "	3417	200 00
	G. B. Kauffman	" "	3418	200 00
	Wm. McPherson	" "	3419	200 00
	F. A. Ray	" "	3420	200 00
	Edw. Orton, Jr	" "	3421	180 00
	J. N. Bradford	" "	3422	180 00
	G. W. McCoard	" "	3423	160 00
	C. P. Linhart	" "	3424	160 00
	H. C. Lord	" "	3425	150 00
	W. D. Gibbs	" "	3426	140 00
	Perla G. Bowman	" "	3427	140 00
	F. C. Caldwell	" "	3428	140 00
	D. S. White	" "	3429	140 00
	S. A. Norton	" "	3430	120 00
	R. I. Fulton	" "	3431	120 00
	Olive B. Jones	" "	3432	120 00
	J. E. Boyd	" "	3433	110 00
	C. E. Sherman	" "	3434	100 00
	T. E. French	" "	3435	100 00
	C. W. Mesloh	" "	3436	100 00
	F. C. Clark	" "	3437	100 00
	W. H. Siebert	" "	3438	100 00
	A. W. Hodgman	" "	3439	100 00
	I. R. Taylor	" "	3440	100 00
	J. A. Bownocker	" "	3441	90 00
	W. A. Knight	" "	3442	90 00
	C. W. Weicks	" "	3443	90 00
	C. C. Sleffel	" "	3444	90 00
	C. W. Foulk	" "	3445	85 00
	C. L. Arnold	" "	3446	85 00
	K. D. Swartzel	" "	3447	85 00
	C. A. Dye	" "	3448	85 00
	J. S. Hine	" "	3449	85 00
	J. H. Schaffner	" "	3450	80 00
	Clark Wissler	" "	3451	80 00
	W. L. Graves	" "	3452	80 00
	C. A. Bruce	" "	3453	80 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Mar. 26	C. W. Burkett	1/10 salary March inst., 1898	3454	$75 00
	W. F. Lavery	" "	3455	70 00
	F. Haas	" "	3456	70 00
	E. E. Harrold	" "	3457	70 00
	A. E. Vinson	" "	3458	65 00
	F. L. Laudacre	" "	3459	65 00
	E. M. Van Harlingen	" "	3460	60 00
	T. K. Lewis.	" "	3461	60 00
	Stella Elliot	" "	3462	60 00
	Harriet Townshend	" "	3463	55 00
	F E. Kester	" "	3464	55 00
	Maude Jeffrey	" "	3465	50 00
	Gertrude Keilicott	" "	3466	50 00
	Theo. Griffin	" "	3467	40 00
	J. T Martin	" "	3468	40 00
	J. R. Spurrier	" "	3469	35 00
	M. Dresbach	" "	3470	30 00
	H. W. Kuhn	" "	3471	30 00
	Horace Judd	" "	3472	30 00
	J. M. Fox	" "	3473	30 00
	C. T. Morris	" "	3474	30 00
	J. F. Cunningham	" "	3475	30 00
	J. G. Boyd	" "	3476	25 00
	Void	" "	3477	
	Robt. Fischer	" "	3478	20 00
	F. O. Clements	" "	3479	20 00
	A. V. Bleininger	" "	3480	20 00
	J. A. Thompson	" "	3481	13 50
	O. A. Davis	" "	3482	10 00
	W. E. Chappell	" "	3483	10 00
	H. Gamper	" "	3484	10 00
	K. Nurian	" "	3485	10 00
	E. E. Somermeier	" "	3486	10 00
	W. F. Hunter	" "	3487	25 00
	W. H. Page	" "	3488	135 00
	E. B. Kinkead	" "	3489	100 00
	D. F. Pugh	" "	3490	70 00
	E. O. Randall	" "	3491	65 00
	G. W. Knight	" "	3492	25 00
	F. F. D. Albery	" "	3493	15 00
	J. M. Collins	" "	3494	10 00
	J. H. Canfield	Salary March, 1898	3495	500 00
	Alexis Cope	"	3496	187 50
	W. C. McCracken	"	3497	125 00
	G. R. Rose	"	3498	65 00
	W. B. Beattie	"	3499	54 17
	Edith Cockins	"	3500	54 17
	Chas. Low	"	3501	54 17
	Jean Blackford	"	3502	50 00
	C. B. Hine	"	3503	50 00
	F. D. Cope	"	3594	50 00
	Arthur Chantler	"	3505	45 00
	Wm. Standley	"	3506	45 00
	Benj. Le Bay	"	3507	45 00
	Harry Martz	"	3508	45 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Mar. 26	Jas Kelley	Salary March 1898	3509	$41 67
	J. H. Brown	" "	3510	40 00
	M. H. Cook	" "	3511	40 00
	W. Whitestine	" "	3512	40 00
	D. D. Geren	" "	3513	40 00
	F. B. Brewer	" "	3514	40 00
	J. E. Adams	" "	3515	40 00
	J. Conrad	" "	3516	40 00
	F. W. Prentiss	" "	3517	33 33
	Wash. Townsel	" "	3518	30 00
	Edw. Stalter	" "	3519	20 00
	Wm. Weir	" "	3520	20 00
	Void		3521	
25	M. Zimmerman	Service one week dept. dom. science	3522	3 50
26	H. Chantler	$\frac{1}{10}$ salary March inst., 1898	3523	40 00
26	Lucy Allen	Service as curator archæological collection	3524	20 00
April 1	M. Zimmerman	Service one week dept. dom. science	3525	3 00
2	H. E. Kennedy, supt	Pay roll workmen this day	3526	141 5
7	Bausch & Lomb Opt. Co	Boxes, slips, etc	3527	10 13
	Bissell Dodge & E Co	Crowfoot zines	3528	1 05
	Blackwood, Green & Co	Hardware	3529	1 05
	Kauffman-Lattimer Co	Chemicals	3530	337 74
	Schaffer & Bundenberg	Counters, chemical thermometer, etc	3531	90 73
	Cap. City Mch. Works	Pulley belts, etc	3532	23 21
	Col. Supply Co	Hardware	3533	31 25
	Sheerwood Mfg. Co	Pipe, nut and strainer	3534	1 60
	Kimball & Mathews	Dry plates, etc	3535	4 42
	Col. Merch. Co	1 60-gallon galvanized gasoline tank	3536	3 25
	C. G. Bradley	1 gallon copper measure	3537	95
	L. L. Starrett & Co	Surface gauge and speed indicator	3538	6 90
	Nitschke Bros	Ink, blank slips, etc	3539	85
	E. H. Bailey	133.5 hours (@ 15c	3540	20 00
	A. F. Hall	1 month work (@ $60	3541	60 00
	H. Judd	10 hours (@ 25c carp. work	3542	2 50
	C. Riddle	6 hours (@ 15c	3543	90
	Seraphim B. Book Co	Binding books	3544	124 05
	G. W. Knight	Books bought	3545	1 80
	Am. Inst. Elect. Eng	Subscriptions transactions	3546	5 00
	Burrows Bros. Co	Books per invoice	3547	43 28
	R. R. Bowker	Annual Literary Index	3548	3 50
	Seraphim B. Book Co	Books	3549	41 15
	G. Stechert	Books per invoices	3550	55 55
	Schoedinger, Fearn & Co	Hardware	3551	10 55
	Cent. Ohio Paper Co	Paper	3552	1 44
	Col. Paint Mfg. Co	1 can paint	3553	25
	Col. Ed. Elect. Light Co	Cleats and carbons	3554	1 12
	Elect. Appliance Co	Electrical supplies	3555	24
	Tallmadge Hardware Co	Hardware	3556	7 12
	Blackwood, Green & Co	Conductor, etc	3557	1 45
	Andrew Earl	Fittings	3558	3 85

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
April 7	Columbus Supply Co..	Fittings	3559	$12 24
	A. A. Griffing Iron Co ..	Valve	3560	5 00
	Col. Rubber & Belt. Co.	"	3561	1 05
	Palmer & Beck ...	Galv. iron, labor, etc	3562	11 71
	Columbus Brass Co	Brass bolts, etc	3563	65
	Cap. City Mch. Works..	Fittings, etc	3564	17 54
	Col. Sewer Pipe Co	3 sacks cement	3565	1 00
	Wheeler Cond. & E. Co	Set rubber valves	3566	7 95
	C. E. Lee	12 hours (@ 12½c	3567	1 25
	W. Staley	29 hours (@ 10c	3568	2 90
	Warren Atkinson	6 hours work (@ 10c	3569	50
	M. C. Hunter	26 " "	3570	2 60
	E. G. Webster	32 " 12½c	3571	4 00
	John Cain	41¾ " 10c	3572	4 18
	R. E. McIntosh	65 " 12½c	3573	8 12
	R. R. Dunlap	12½ " 10c	3574	1 25
	Robt. Butterworth	12 " 10c	3575	1 20
	D. K. Starbuck	9½ " 10c	3576	93
	A. T. Kaseley	20 " 15c	3577	3 00
	John Hertner	8½ hours work (@ 12½c., 25 hrs. (@ 10c	3578	3 56
	Mitchell Adv Co	4 months subcription time card	3579	1 00
	W. U. Teleg. Co	Messages	3580	3 59
	Monypeny Ham. Co	6 doz Ivory	3581	4 00
	H. A. Getz	Palm leaves etc	3582	4 50
	Nitschke Bros	White imp. book	3583	1 25
	Miller Furn. Co	4 oak tables, etc	3584	27 50
	A. D. Telegraph Co	Messages	3585	25 95
	L. B. Wing	Expense meeting, March 18, April 7, 1898	3586	20 00
	Fkl. Toilet Supply Co ..	Towels, main bldg., etc	3587	1 75
	Blackwood, Green & Co	Hardware	3588	3 10
	Green, Joyce & Co	6 dozen towels	3589	7 50
	Cent. Ohio Paper Co	Paper	3590	1 50
	Tallmadge Hdw. Co	Hardware	3591	1 90
	Leonard & Ellis	1 barrel oil	3592	16 25
	Tracy-Wells Co	Dusters, maps, etc	3593	13 14
	Standard Oil Co	Oil	3594	9 50
	Postal Tel. Cable Co	Messages	3595	5 21
	C. E. Barnet	Amanuensis work	3596	9 52
	Mrs. Myers	Laundry work	3597	80
	F. R. West	83 hrs. guide service, etc	3598	10 37
	J. R. Smith	Expense attending Mrs. Page's funeral	3599	1 75
	E. G. Oberlin	67 hours guide, etc	3600	8 37
	R. J. Seymour	65 "	3601	8 12
	W. G. Worcester	28 lantern slides	3602	8 40
	A. McLaughlin	49 hours record work	3603	7 35
	Engelke & Bigelow	Freight and cartage	3604	23 72
	Alexis Cope	Expense, trip to Portsmouth, and Mrs. Page's funeral	3605	11 15
	C. H. Woodruff	Carpenter work	3606	50 27
	G. E. Stechert	Books	3607	20 46
	Hann & Adair	500 letter heads	3608	2 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
April 7	E. J. McNamara	Lanterns	3609	$65 00
	Paul Steam System Co.	Contract balance	3610	525 00
	M. L. Blose	90 hours @ 12½c. and 17½ hours @ 10c	3611	7 91
	J. R. Spurrier	112½ hours work, etc	3612	23 05
	Bissell Dodge & E. Co.	Supplies	3613	14 14
	H. Braun Sons & Co.	Thermo. cantery, etc	3614	30 68
	Tallmadge Hdw. Co.	Hardware	3615	13 30
	Sparhawk & Detchon	Horses for dissection	3616	15 93
	Journal Com., Med. & Vet. Archives	Advertisement	3617	8 50
	Henry Goldsmith	Music, etc	3618	11 05
	E. O. Neski	10 lessons, band	3619	20 00
	M. C. Lilley Co.	Swords, belts, etc	3620	37 25
	T. J. Godfrey	Exp. meeting April 7, 1898	3621	14 50
	Maggie Zimmerman	1 week's services department domestic science	3622	3 50
	W. I. Chamberlain	Exp. meeting April 7, 1898	3623	22 85
	F. C. McKinney	64 hours guide	3624	8 00
	J. C. Britton	90 hours work @ 15c	3625	13 50
	J. A. Thompson	12 " 12½c	3626	1 50
	J. C. Perry	65 " 12½c	3627	8 13
	M. Peck	31 days work @ $1.50	3628	46 50
	Thos. Algeo	36 days @ 8½ hrs. @ $1.50	3629	40 27
	Thos. Bonde	31 days @ $1.50	3630	46 50
	Jas. Stainbrook	31 days work @ $1.50	3631	46 50
	Joe Garretson	23 "	3633	34 50
	Chas. Pixler	29 "	3633	43 50
	W. H. Case	27 "	3634	40 50
	Benj. Rushmer	Fittings, etc., & horse shoeing	3635	18 30
	Franklin Toilet Sup. Co.	Furn. towels Towns. Hall	3636	4 18
	A. W. Kiler	Drugs, chemicals, etc	3637	3 41
	Wellington Box Co	Boxes; etc	3638	4 75
	J. F. Williams & Sons	2,000 pounds gluten meal	3639	16 69
	Heskett Bros.	Material and labor on crates	3640	3 00
	J. E. Wing	Making three crates	3641	2 25
	O. Erf	75 hours work @ 15c	3642	11 25
	J. Shawver	Lecture "Barn Building" and expenses	3643	14 40
	H. P. Miller	4 days lecturing @ $3, exp. $4	3644	16 00
	F. S. Johnston	111 hours cler. work @ 12½c	3645	13 87
	Jeffrey Mfg. Co	2 car loads coal	3646	25 66
	Murray City Coal Co.	Coal	3647	739 30
	E. A. Cole & Co	"	3648	3 61
	Jno. McAllister	103 hours work @ 12½	3649	12 87
	Standard Oil Co	30 gallons oil	3650	1 35
	E. S. Lawrence	Printing lab. report	3651	2 00
	W. J. Davidson & Son	Coal	3652	2 75
	Col. Bolt. Works	Bolts and nuts	3653	1 20
	P. Hayden S. & H. Co	Hardware	3654	8 78
	Scott, Foresman & Co	1 Virgil Licenses	3655	50
	Raymond Osborn	2 days work arch. museum	3656	2 00
	The McMillan Co.	Books	3657	10 99
	Oxford Un. Press	"	3658	2 51
	Ulmer & Hoff	Tape, etc	3659	8 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
April 7	P. Copland	400 gooseberry bushes	3660	$60 00
	S. V. Peppel	Labor	3661	13 50
	E. T. Fullmer	99 hours work @ 15 c	3662	14 85
	Borger Bros. Co	Smoke stack, etc	3663	33 00
	H. H. Ballard	4 dozen c ip binders, etc	3664	5 18
	Richards & Co	Cover glasses	3665	5 44
	W. J. Johnston Co	2 copies Elec. World	3666	60
	O. T. Corson	Adv	3667	22 50
	Abr. Thompsons Sons	500 reading blanks	3668	1 50
	Hann & Adair	Printing, etc	3669	15 35
	Webb Sta. & Ptg. Co	Letter heads, env, etc	3670	32 00
	Champlin Ptg. Co	Letter heads, etc	3671	44 55
	J. B. Allen	Postage on circulars	3672	4 00
	Spahr & Glenn	Note circulars	3673	2 75
	A. H Smythe	Blackboard, etc	3674	4 90
	J. P. Friez	Max. thermometer	3675	4 50
	Clinton Nat'l Bank	Bill of ex. Kew Observatory	3676	8 12
	McAllister Mohler Co	Desk, mirrors, etc	3677	81 83
	Jas. Clark	Plasteriug	3678	150 48
	Fkl. Toilet Sup. Co	Towels, gymnasium	3679	19 67
	J. R. Hughes & Co	Swimming apparatus	3680	1 50
	Ohio Furn. Co	1 table	3681	9 00
	D. C. Huddleson	Salary assistant dept. phy. training	3682	25 00
	Lily Weeks	4 weeks work janitress	3683	16 00
	N. P. Oglesby	48 hours work @ 15c	3684	7 20
	W. B. Calkins	148 "	3685	17 10
	Bausch & Lomb Op. Co.	Zeiss sec	3686	31 25
	A. H. Smythe	Books	3687	45 00
	Hager & Graves	Groceries	3688	36 40
	Schoedinger, Fearn & Co	1 scales	3689	3 00
	P. G. Bowman	Sundries purchased	3690	2 88
	A. A. Heller	Catalogue American plants	3691	3 60
	Cambridge Bot. Sup. Co	Biblio. Am. Botany	3692	5 00
	O. A. Davis	184¾ hours work @ 17½c etc	3693	31 64
	A. E. Loeb	65 "	3694	11 43
	Void		3695	
	Blackwood, Green & Co	Hdwe & hollowware	3696	26 00
	Lucy Allen	116 hours wk. lib. @ 12½c	3697	14 50
	L. T. Williams	114 hrs. wk. @ 12½c 12 ni. @ 33⅓	3698	18 25
	Yost & Packard	Serv. as architects	3699	3,388 59
	Peters, Burns & Pretz	"	3700	1,448 40
	Col. Gas Co	Gas used during March, 1898	3701	144 75
	Ohio Pipe Co	Threshold plates	3702	1 38
	C. H. Lyon	Switching charges	3703	6 00
	T. J. Dundon	Lumber	3704	518 68
	R. A. McClure	Lumber, drayage, etc	3705	32 50
	Chas. Wuichet & Co	Roofing	3706	14 73
	Yost and Packard	Services as architects Orton Hall	3707	262 50
8	Tallmadge Hdw. Co	Hardware	3708	9 21
	Lawrence Press Co	Office stationery	3709	11 15
	C. E. Morris & Co	Iron	3710	185 22
	Ruggles-Gale Co	Office stationery	3711	1 10

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Apr. 8	Schoedinger, Fearn Co..	Hardware	3712	$266 99
	Taylor Mantel & G. Co.	Mill work, lumber	3713	530 54
	Minnie Rodgers	Stenographer	3714	15 40
	S. T. Knight	Sewer contractor, balance	3715	62 17
	Fitzpatrick & Hoepfner	Steam heating	3716	257 29
	Caldwell & Iseminger..	Lumber, mill work	3717	301 18
	Acme Paving Co..	Cement..	3718	75 86
	White & Pixler	Elect. work	3719	174 18
	F. O. Schoedinger	Hardware	3720	326 24
	Col. Sewer Pipe Co	Pipe	3721	6 49
	Kilbourne, Jones Co	Hardware	3722	487 42
	J. W. Coulson & Co	Painting, glazing, etc	3723	445 45
	Fish Stone Co	Stone	3724	14 85
	Cent. Ohio Paper Co	Paper	3725	6 80
	E. J. McNamara	Gas fittings	3726	4 75
	The Rock Plaster Co	Order from James Clark for plastering	3727	107 00
	D. C. Beggs & Co	Mdse	3728	6 21
	Col. Wire and Iron Wks	Wire	3729	15 50
	W. U. Teleg. Co	Messages	3730	75
	Gilsonite Roof & Pav.Co	Paving rooms	3731	235 25
	Von Gerichten Art Glass Co	Lights ceiling Biological building	3732	207 46
	Penn Fuel Co	Cement	3733	8 44
	Orr, Brown & Price	Mur. acid	3734	4 89
	Col. Brass Co	Brass sliding pole, gymnasium	3735	55 00
	Blackwood, Green Co	Brush	3736	40
	Taylor, Beall & Co	Stone	3737	52 50
	The D. C. Beggs Co	Curtains, etc	3738	64 48
	W. U. Teleg. Co	Messages	3739	1 35
	A. S. W. Huffman	Plumbing	3740	840 57
	G. R. Butler & Co	Mill work, furniture	3741	672 89
	J. W. Coulson & Co	Lawn tennis court, etc	3742	25 39
	Caldwell & Iseminger..	Lumber	3743	185 00
	Taylor Mantel Grate Co.	Fittings	3744	279 65
	Col Wire and Iron Wks	Wire guards	3745	4 00
	A. G. Spalding & Bros..	Lockers, gymnasium	3746	1,412 77
	McAllister, Mohler & Co	Desks, chairs, etc	3747	370 08
	J. T. Mack	Expenses attending meetings April 5, 6, 1898	3748	13 93
9	H. E. Kennedy	Services as superintendent	3749	256 39
11	F. M. Senter, P. M	600 1c stamps	3750	6 00
14	F. M. Senter, P. M	1000 stamped envelopes	3751	22 60
16	Maggie Zimmerman	1 week labor	3752	3 00
	H. E. Kennedy, Supt	Pay roll of workmen	3753	125 85
18	C. L. Wattering	Hauling	3754	6 10
	J. A. Schauck	Course of lectures, college of law	3755	100 00
19	Col. Water Works	Water rents and charges	3756	513 52
21	Maggie Zimmerman	1 week's work department domestic science	3757	3 00
22	K. Nurian	Salary, Sept., 1898	3758	10 00
55	F. M. Center, P. M	800 2c stamps	3759	16 00
30	E. A. Eggers	1/10 salary Apr. inst., 1898	3760	225 00
28	F. D. Cope	Salary for April, 1898	3761	50 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Am
1898.				
April 28	Jean Blackford	Salary for April, 1898	3762	
30	Edw. Stalter	Salary for May, 1898	3763	
	Edw. Stalter	½0 salary April inst., 1898	3764	
	T. F. Hunt	" "	3765	
	H. A. Weber	" "	3766	
	A. M. Bleile	" "	3767	
	W. A. Kellerman	" "	3768	
	C. N. Brown	" "	3769	
	Edw. Orton	" "	3770	
	W. F. Hunter	" "	3771	
	J. R. Smith	" "	3772	
	G. W. Knight	" "	3773	
	W. R. Lazenby	" "	3774	
	S. R. C. Derby	" "	3775	
	R D. Bohanan	" "	3776	
	W. T. Magruder	" "	3777	
	J. P. Gordy	" "	3778	
	W. H. Scott	" "	3779	
	B F. Thomas	" "	3780	
	J. V. Denney	" "	3781	
	B. L. Bowen	" "	3782	
	A. L. Williston	" "	3783	
	N. W. Lord	" "	3784	
	G. B. Kauffman	" "	3785	
	Wm. McPherson	" "	3786	
	F. A. Ray	" "	3787	
	Edw. Orton, Jr	" "	3788	
	J. N. Bradford	" "	3789	
	G. W. McCoard	" "	3790	
	C. P. Linhart	" "	3791	
	H. C. Lord	" "	3792	
	E. A. Hitchcock	" "	3793	
	W. D. Gibbs	" "	3794	
	P. G. Bowman	" "	3795	
	F. C. Caldwell	" "	3796	
	D. S. White	" "	3797	
	S. A. Norton	" "	3798	
	R. I. Fulton	" "	3799	
	Olive Jones	" "	3800	
	J. E. Boyd	" "	3801	
	C. E. Sherman	" "	3802	
	T. E. French	" "	3803	
	C. W. Mesloh	" "	3804	
	F. C. Clark	" "	3805	
	W. H. Siebert	" "	3806	
	A. W. Hodgman	" "	3807	
	J. R. Taylor	" "	3808	
	J. A. Bownocker	" "	3809	
	W. A. Knight	" "	3810	
	C. W. Weick	" "	3811	
	C. C. Sleffel	" "	3812	
	C. W. Foulk	" "	3813	
	C. L. Arnold	" "	3814	
	K. D. Swartzel	" "	3815	
	C. A. Dye	" "	3816	

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
April 30	J. S. Hine	$\frac{1}{10}$ salary April inst., 1898	3817	$85 00
	J. H. Shaffner	" "	3818	80 00
	Clark Wissler	" "	3819	80 00
	W. L. Graves	" "	3820	80 00
	C. A. Bruce	" "	3821	80 00
	C. W. Burkett	" "	3822	75 00
	W. F. Lavery	" "	3823	75 00
	F. Haas	" "	3824	75 00
	E E. Harrold	" "	3825	75 00
	A. E. Vinson	" "	3826	65 00
	F. L. Landacre	" "	3827	65 00
	E. E. Van Harlingen	" "	3828	60 00
	T. K. Lewis	" "	3829	60 00
	Stella Elliott	" "	3830	60 00
	Harriet Townshend	" "	3831	55 00
	F. E. Kester	" "	3832	55 00
	Maude Jeffrey	" "	3833	50 00
	Gertrude Kellicott	" "	3834	50 00
	Theo Griffin	" "	3835	40 00
	J. T. Martin	" "	3836	40 00
	J. R. Spurrier	" "	3837	35 00
	M. Dresback	" "	3838	30 00
	H. W Kuhn	" "	3839	30 00
	H. Judd	" "	3840	30 00
	J. H. Fox	" "	3841	30 00
	C. T. Morris	" "	3842	30 00
	J. F. Cunningham	" "	3843	30 00
	J. G. Boyd	" "	3844	25 00
	C. B. Fredericks	" "	3845	25 00
	Void	" "	3846	
	F. Fischer	" "	3847	20 00
	F. O. Clement	" "	3848	20 00
	A. V. Bleininger	" "	3849	20 00
	J. A. Thompson	" "	3850	13 50
	O. A. Davis	" "	3851	10 00
	W. E. Chappell	" "	3852	10 00
	H. Gamper	" "	3853	10 00
	K. Nurian	" "	3854	10 00
	E. E. Somermeier	" "	3855	10 00
	W, H. Page	" "	3856	135 00
	E. B. Kinkead	" "	3857	100 00
	D. F. Pugh	" "	3858	70 00
	E. O. Randall	" "	3859	65 00
	G. W. Knight	" "	3860	25 00
	F. F. D. Albery	" "	3861	15 00
	J. H. Collins	" "	3862	10 00
	J. H. Canfield	Salary for April, 1898	3863	500 00
	Alexis Cope	" "	3864	187 00
	W. C. McCracken	" "	3865	125 00
	G. R. Rose	" "	3866	65 00
	W. R. Beattie	" "	3867	54 00
	Edith Cockins	" "	3868	54 00
	Chas. Low	" "	3869	54 00
	M. Zimmerman	Serv.dorm. 2 wks. 4-28 to 5 5, '98	3870	6 00
	C. B. Hine	Salary for April, 1898	3871	50 00
	A. Chantler	" "	3872	45 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
April 30	Wm. Standley	Salary for April, 1898	3873	$45 00
	Benj. LeBay	" "	3874	45 00
	H. Martz	" "	3875	45 00
	Jas. Kelly	" "	3876	41 67
	J. H. Brown	" "	3877	40 00
	M. H. Cook	" "	3878	40 00
	W. Whitestine	" "	3879	40 00
	D. D. Geren	" "	3880	40 00
	F. B. Brewer	" "	3881	40 00
	John Adams	" "	3882	40 00
	John Conrad	" "	3883	40 00
	F. W. Prentiss	" "	3884	33 33
	Wash. Townshend	" "	3885	30 00
	Wm. Weir	" "	3886	20 00
	H. Chantler	" "	3887	40 00
29	D. M. Massie	Expenses as trustee February 4, 1898, to date	3888	17 50
30	A. C. Barrows	$\frac{1}{10}$ salary April inst., 1898	3889	225 00
	H. E. Kennedy, supt.	Pay roll of workmen	3890	42 80
	C. L. Wattering	Grading about Arm. and Gym.	3891	131 10
	Lucy Allen	$\frac{1}{10}$ salary April inst., 1898	3892	20 00
May 5	Burrows Bros. Co.	Books	3893	21 84
	Helman-Taylor	Books	3894	24 25
	Psychological Review	Subscription	3895	75
	Houghton, Mifflin & Co	Set Lowell, 11 vols	3896	22 00
	Seraphim B. Book Co.	Books	3897	28 50
	Champlin Ptg. Co.	Lib. cards printed, etc	3898	4 50
	Library Bureau	Tips, rubber, etc	3889	16 40
	Cent. Ohio Paper Co.	Scratch pads, etc	3900	85
	Boston Book Bind'g Co.	Binder and postage	3901	1 11
	Office Specialty Co.	Index library, ect	3902	37 90
	G. E. Stechert	Books	3903	70 91
	B. D. Potts	Furnace burner	3904	25
	General Elect. Co.	Clear globes, etc	3905	3 75
	M. C Hunter	4½ hours @ 10c., 22¾ hours @ 12½c	3906	3 29
	W. I. Chamberlain	Exp. meeting board and com.	3907	14 70
	D. C. Huddleson	Assistant, physical training, April, 1898	3908	25 00
	C. W. Woodruff	Carpenter work	3909	4 16
	Champlin Ptg. Co.	Summer school folders	3910	67 65
	C. H. Evans & Co.	Advertising	3911	5 00
	The Lantern	Advertising	3912	90 00
	Hann & Adair	Vouchers, tickets, etc	3913	20 40
	Col. Supply Co.	Fittings	3914	10 84
	Schoedinger, Fearn Co.	Fittings	3915	11 21
	Tallmage Hardware Co.	Hardware	3916	1 62
	Vogelgesang Furn. Co.	Repairing furnace	3917	28 90
	Blackwood, Green & Co.	Labor, tin, solder, etc	3918	3 42
	Columbus Brass Co.	Piston for syphon	3919	50
	D'Este & Seely Co	1 balanced trap	3920	2 50
	O. A Day	35 hours work @ 17½c	3921	6 25
	Babcock & Wilcox Co.	Fire door tile, etc	3922	28 90
	J. C. Perry	8 hours work @ 21½c	3923	14 75
	A. F. Wilcox	40 hours work @ 15c	3924	6 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
May 5	J. C. Britton	84 hours work @ 15c	3925	$12 60
	W. Gilmore	69 " " 12½c	3926	8 62
	H. L. Belden	21 " "	3927	2 63
	Jay Palmer	20 " "	3928	2 50
	J. G. Ridinger	19 " "	3929	2 38
	J. A. Thompson	46 " "	3930	5 75
	F. C. Kettler	18 " "	3931	2 25
	A. F. Conrade	10 " "	3932	1 25
	E. S. Ream	40 " "	3933	5 00
	A. W. Livingston's Sons	Seeds, etc.	3934	21 71
	J. R. Smith	Expenses visiting Wilmingt'n high school	3935	5 25
	W. S. Orvis	1 dozen sheets carbon paper	3936	50
	E. Faber	Pencils	3937	94
	O. S. Lear	Paper and stencil	3938	2 25
	Nitschke Bros.	Mucilage, ink, etc	3939	1 75
	J. H. Canfield	Amt. adv. E H. Oberlin	3940	4 07
	C. O. Paper Co	Paper	3941	19 70
	Urlin & Pfeiffer	Photographs	3942	51 50
	Standard Oil Co	Oil	3943	37 90
	Z. L. White & Co	Calico, etc	3944	69
	J. M. & W. Westwater	Lantern burner, etc	3945	55
	Bakers' Art Gallery	Copies crayons	3946	34 00
	Cols. Transfer Co	Carriage service	3947	3 00
	E. F. Charles	Funeral decorations	3948	1 45
	W. U. Telegraph Co	Messages	3949	7 55
	L. B. Powell	Services, quartermaster, winter term	3950	5 00
	F. R. West	73 hours' work, guide, etc	3951	9 12
	F. C. McKinney	81 " " "	3952	10 12
	R. J. Seymour	75 " " "	3953	9 37
	C. E. Barnet	Amanuensis work	3954	9 30
	C. U. Telephone Co	Telephone service	3955	60 00
	C. A. Douglas	Brushes and dust gatherers	3956	7 50
	Murray City Coal Co	Coal	3957	579 49
	Jeffrey Mfg. Co	"	3958	17 26
	M. Peck	29½ days work @ $1.50	3959	44 25
	Thos. Bonde	30 " " "	3960	45 00
	W. H. Case	Care, heating T. H.	3961	36 75
	J. Garretson	15 days' work @ $1.50	3962	22 50
	T. B. Algeo	208 hours' work @ $1.50	3963	31 20
	J. Stainbrook	28 days' work @ $1.50	3964	42 00
	Lucy Allen	104 hours work @ 12½c	3965	13 00
	J. A. Thompson	14 " " "	3966	1 75
	L. T. Williams	15 months' work @ 33⅓c. and 82 hours work @ 12½c	3967	15 25
	Blanche Mickey	92 hours work @ 5c	3968	4 60
	W. B. Calkins	84 " " 12c	3969	12 60
	N. P. Oglesby	34 " " 15c	3970	5 10
	E. H. Bailey	Janitor mech. hall	3971	20 00
	Lily Weeks	Janitress, April, 1898	3972	16 00
	Baker & Co	Platinum, etc	3973	3 67
	Rochester Opt. Co	Holders, etc	3974	30 00
	Blackwood, Green & Co.	Copper baths	3975	7 50
	Am. Aristotype Co	Photo plates	3976	43 58

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amo
1898.				
May 5	E. E. Harrold	1 basket ball	3977	
	P. Hayden S. H. Co	Collar and screws	3978	
	H. Goldsmith	Music, band, etc	3979	
	C. E. Nicholas	Copperas, jars, etc	3980	
	C. W. Fridley	Repair instruments	3981	
	Lawrence Press Co	Ptg. sergeants reports	3982	
	M. C. Lilley & Co	Rep. swords, belts, etc	3983	
	G. D. Cross Lumber Co.	Lumber	3984	
	Tallmadge Hdw. Co	Hardware	3985	
	Bissell, Dodge & E. Co.	Wire, etc	3986	
	C. H. Woodruff	Wire, etc	3987	
	Western Elect. Co	Switches	3988	
	Col. Supply Co	Fittings	3989	
	Schaffer & Budenberg	Thermometers, etc	3990	
	Blackwood, Green & Co	Hardware	3991	
	Erie Gas Engine Co	1 gas bag	3992	
	P. Hayden, S. H. Co	Brass castings	3993	
	E. H. Bailey	45 hrs. wk. @ 15c	3994	
	A. F. Hall	1 mo. as machinist	3995	
	C. E Barnet	Clerical work	3996	
	McMillan & Co	Books	3997	
	J. R Smith	Expressage	3998	
	G. E. Stechert	Books	3999	
	D S White	Exp. hauling cadaver	4000	
	Creamery Pkg. Co	Tester	4001	
	A. W. Livingston's Sons	Seeds, etc	4002	
	J. Weisheimer	Grinding ear corn	4003	
6	Fkl. Toilet Sup. Co	Towels furnished	4004	
	W. R. Beattie	Flowers and smilax	4005	
	E. R. Graves	Moulding, etc	4006	
	E. M. VanHarlingen	Cash expended supplies	4007	
	Monypeny, H. Co	Blacking	4008	
	Hatton Bros	Acid thermometers, etc	4009	
	E. L. Baringer	Labeling exhibits	4010	
	Mallinckrodt Ch. Wks	Chemicals	4011	
	Kauffman, Lattimer Co	Chemicals	4012	
	Jno. McAllister	72½ hrs. wk	4013	
	B.S Kaolin & F'd Sp'rCo	Feldspar	4014	
	Golding & Sons Co	Flint	4015	
	Mayer Pottery Co	Silkmans spar	4016	
	G. Bruder	3 lessons, band	4017	
	J. F. Roberts	1 lesson, band	4018	
	E. O. Neske	3 lessons, band	4019	
	E. L. Fullmer	87 hrs. wk. @ 15c	4020	
	F. S. Johnston	102 hrs. wk. @ 12½c	4021	
	J. M. Thorburn & Co	Seeds, etc	4022	
	H. Phillips Seed & I.Co.	Seeds, etc	5023	
	J. F. Cunningham	Circulars, postage, etc	4024	
	C. N. Brown	Exp. surveying Page farm	4025	
	Fitzpatrick & Hoepfner	Plumbing and heating	4026	
	White & Pixley	Electrical work	4027	
	Champion Iron Co	Iron work	4028	
	Webb Sta. & Ptg. Co	Paper, etc	4029	
	Col. Rubber & Beltg. Co.	White waste, valves, etc	4030	

STATEMENT II--Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
May 6	T. J. Godfrey	Exp. meeting board and com.	4031	$13 55
	Kelton & Converse	Lumber	4032	4 06
	Tallmadge Hardware Co	Hardware	4033	5 26
	Fkl. Toilet Supply Co.	Towels furnished	4034	8 75
	Bissell, Dodge & E. Co.	Fittings	4035	22 10
	Cap. City Machine Wks	Fittings	4036	5 57
	Engelke & Bigelow	Freight and cartage	4037	42 22
	C. H. Woodruff	Carpenter work	4038	36 37
	R. E. McIntosh	53¾ hours @ 12½c	4039	6 62
	E. G. Webster	59¾ hours @ 12½c	4040	7 45
	A. E. Loeb	175½ hours @ 17½c	4041	30 65
	W. E. Chappell	11 hours@ 15c	4042	1 65
	A. D. Teleg. Co	Messenger service	4043	1 10
	Fkl. Toilet Supply Co.	Towels furnished	4044	19 09
9	Mrs. Valeria Kellicott	Salary Prof. D. S. Kellicott to June 30th	4045	675 00
	Columbus Gas Co	Gas, April, 1898	4046	114 68
	J. T. Mack	Expenses May meeting	4047	18 44
	F. M. Senter, P. M.	1000 1c stamps	4048	10 00
16	J. McLain Smith	Exp. meeting, May 5, 1898	4049	20 71
11	D. M. Massie	" "	4050	7 00
	Seasongood & Mayer	Int. bond trans., Sept., 1896	4051	206 25
12	J. V. Denney	1/10 salary, May and June, 1898	4052	450 00
14	H. E. Kennedy, supt.	Pay roll workmen	4053	48 50
	C. L. Wattering	Grading about new buildings.	4054	91 65
19	L. B. Wing	Expenses meeting May 5 and 6, 1898	4055	6 00
21	Columbus Street Ry. Co	Car tickets	4056	5 00
	F. M. Senter, P. M.	30 10c, 30 5c, 275 2c postage stamps	4057	10 00
23	F. W. Prentiss, Cashier.	Interest payable June 1st, in New York City	4058	3,375 00
24	Leo. Chase	63 hours work @ 15c	4059	9 45
25	M. Zimmerman	Serv. dept. dom. science	4060	3 00
	L. B. Wing	Exp. attg. meeting this day	4061	6 31
	W. I. Chamberlain	" "	4062	14 50
26	C. H. Woodruff	Labor in athletic field	4063	106 25
27	F. M. Senter, P. M.	Postage stamps	4064	22 60
	F. W. Prentiss	Salary for May, 1898	4065	43 34
28	T. F. Hunt	1/10 salary May inst., 1898	4066	250 00
	H. A. Weber	" "	4067	225 00
	A. M. Bleile	" "	4068	225 00
	W. A. Kellerman	" "	4069	225 00
	C. N. Brown	" "	4070	225 00
	A. C. Barrows	" "	4071	225 00
	Edward Orton	" "	4072	225 00
	F. A. Eggers	" "	4073	225 00
	J. R. Smith	" "	4074	225 00
	G. W. Knight	" "	4075	225 00
	W. R. Lazenby	" "	4076	225 00
	S. C. Derby	" "	4077	225 00
	R. D. Bohannan	" "	4078	225 00
	W. T. Magruder	" "	4079	225 00
	J. P. Gordy	" "	4080	225 00
	W. H. Scott	" "	4081	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amo
1898.				
May 21	B. F. Thomas	1/10 salary May, inst., 1898	4082	$2
	B. L. Bowen	" "	4083	2
	A. L. Williston	" "	4084	2
	N. W. Lord	" "	4085	2
	G. B. Kauffman	" "	4086	2
	W. McPherson	" "	4087	2
	F. A. Ray	" "	4088	2
	Edw. Orton, Jr	" "	4089	1
	J. N. Bradford	" "	4090	1
	G. W. McCoard	" "	4091	1
	C. P. Linhart	" "	4092	1
	H. C. Lord	" "	4093	1
	E. A. Hitchcock	" "	4094	1
	W. D. Gibbs	" "	4095	1
	P. G. Bowman	" "	4096	1
	F. C. Caldwell	" "	4097	1
	D. S. White	" "	4098	1
	S. A. Norton	" "	4099	1
	R. I. Fulton	" "	4100	1
	J. E. Boyd	" "	4101	1
	Olive Jones	" "	4102	1
	Edith Cockins	Salary for May, 1898	4103	
	Jean Blackford	" "	4104	
	C. E. Sherman	1/10 salary May inst., 1898	4105	1
	T. E. French	" "	4106	1
	C. W. Mesloh	" "	4107	1
	F. C. Clark	" "	4108	1
28	W H. Siebert	" "	4109	1
	A. W Hodgman	" "	4110	1
	J. R. Taylor	" "	4111	1
	J. A. Bownocker	" "	4112	
	W A Knight	" "	4113	
	C. W. Weick	" "	4114	
	C. C. Sleffel	" "	4115	
	C. W. Foulk	" "	4116	
	C. L. Arnold	" "	4117	
	K. D. Swartzel	" "	4118	
	C. A. Dye	" "	4119	
	J. S. Hine	" "	4120	
	J. H. Schaffner	" "	4121	
	C. Wissler	" "	4122	
	W. L. Graves	" "	4123	
	C. A. Bruce	" "	4124	
	C. W. Burkett	" "	4125	
	W. F. Lavery	" "	4126	
	F. Haas	" "	4127	
	E. E. Harrold	" "	4128	
	A. E. Vinson	" "	4129	
	F. L. Landacre	" "	4130	
	E. M. Van Harlingen	" "	4131	
	T. K. Lewis	" "	4132	
	Stella Elliott	" "	4133	
	H. Townshend	" "	4134	
	F. E. Kester	" "	4135	
	Maude Jeffrey	" "	4136	

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
May 28	Gertrude Kellicott	1/10 salary May inst., 1898	4137	$50 00
	Theo. Griffin	" "	4138	40 00
	J. R. Spurrier	" "	4139	35 00
	M. Dresbach	" "	4140	80 00
	H. W. Kuhn	" "	4141	30 00
	H. Judd	" "	4142	30 00
	J. H. Fox	" "	4143	30 00
	C. T. Morris	" "	4144	30 00
	J. F. Cunningham	" "	4145	30 00
	J. G. Boyd	" "	4146	25 00
	C. B. Fredericks	" "	4147	25 00
	Robt. Fischer	" "	4148	20 00
	F. O. Clements	" "	4149	20 00
	A. V. Bleininger	" "	4150	20 00
	R. E. McIntosh	" "	4151	10 00
	W. E. Chappell	" "	4152	10 00
	H. Gamper	" "	4153	10 00
	K. Nurian	" "	4154	10 00
	E. E. Somermier	" "	4155	10 00
	W. F. Hunter	" "	4156	250 00
	W. H. Page	" "	4157	135 00
	E. B. Kinkead	" "	4158	100 00
	D. F. Pugh	" "	4159	70 00
	E. O. Randall	" "	4160	65 00
	G. W. Knight	" "	4161	25 00
	F. F. D. Albery	" "	4162	15 00
	J. H. Collins	" "	4163	10 00
	J. H. Canfield	Salary for May, 1898	4164	500 00
	Alexis Cope	" "	4165	187 50
	W. C. McCracken	" "	4166	125 00
	G. R. Rose	" "	4167	65 00
	W. R. Beattie	" "	4168	54 17
	Chas. Low	" "	4169	54 17
	C. B. Hine	" "	4170	50 00
	A. Chantler	" "	4171	45 00
	Wm. Standley	" "	4172	45 00
	B. LeBay	" "	4173	45 00
	Henry Martz	" "	4174	45 00
	Jas. Kelly	" "	4175	41 67
	J. H. Brown	" "	4176	40 00
	M. H. Cook	" "	4177	40 00
	Wm. Whitestine	" "	4178	40 00
	D. D. Geren	" "	4179	40 00
	F. B. Brewer	" "	4180	40 00
	J. E. Adams	" "	4181	40 00
	Jno. Conrad	" "	4182	40 00
	Wash. Townsel	" "	4183	30 00
	W. Weir	" "	4184	20 00
	H. Chantler	Services as janitor, May, 1898	4185	40 00
	Lucy Allen	Salary for May, 1898	4186	20 00
	F. M. Senter, P. M.	Stamps	4187	20 00
	F. W. Prentiss, V. Pt.	10 M. ctfs. due June 1, '98 and int. 80 M. 6%, due June 1	4188	12,400 00
31	F. W. Prentiss, V. Pt.	Int. due $150 M. ctfs. due this day at Clinton Nat. Bank	4189	3,375 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
May 31	J. C. Perry	Services as janitor, May 1898..	4190	$13 50
June 1	J. T. Mack	Exp. meeting May 25-26-30...	4191	18 15
	L. B. Wing	Exp. meeting ex. com. this day	4192	2 75
	Landon Ptg. & Pub. Co.	Agr. Students Union	4193	2 00
	W. H. Case	Care heating Towns. Hall	4194	15 75
	Jas. Stainbrook	Services as fireman	4195	39 00
	T. Boude	"	4196	46 50
	M. Peck	Helper boiler house	4197	45 00
	J. Garretson	Services plumber's helper	4198	31 50
	F. R. West	Services as guide	4199	8 87
	C. E. Barnet	Serv. as accountant, etc	4200	34 90
	Annis McLaughlin	Work in office of registrar	4201	5 77
	Tracy Wells Co	2 dozen brooms	4202	4 20
	Holcombe & Hoke Co	3 sweepers	4203	4 50
	Monypeny Ham'd Co	Soap	4204	4 00
	Cent. Ohio Oil Co	1 barrel oil	4205	9 97
	Franklin T. Sup. Co	Towels	4206	1 25
	Z. L. White	Cheese cloth	4207	3 38
	W. S. Orvis	Typewriter supplies	4208	2 25
	Cher'gt'n Ptg. & Eng. Co.	Rubber stamp	4209	50
	Cent. Ohio Paper Co	Stationery	4210	3 70
	Col. Litho. Co	10 $1,000 bonds	4211	60 00
	G. N. Carman, Tr	Dues in N. Cent. As. of Coll. Schools	4212	3 00
	G. H. Young, Tr	Dues in Ohio Col. Assoc	4213	5 00
	G. T. Johnson	Toilet paper	4214	10 00
	A. J. Seymour	Work as guide	4215	7 00
	F. C. McKinney	"	4216	10 37
	F. J. Pavlicek	"	4217	10 75
	Tallmadge Hdw. Co	Wire nails	4218	2 10
	Col. Sewer Pipe Co	D-pipe	4219	2 30
	Kelton & Converse	Lumber	4220	200 67
	Wm. McPherson	Labor	4221	5 38
	E. G. Webster	"	4222	69
	A. E. Loeb	"	4223	4 20
	J. Cain	"	4224	50
	F. O. Schoedinger	Repair roof Arm. & Gym	4225	2 20
	TheKilbourne-Jones Co	Locks and keys	4226	8 50
	Acme Paving Co	Cement work	4227	277 08
	T. J. Dundon & Co	Lumber	4228	6 43
	Engelke & Bigelow	Hauling	4229	5 00
	Penn. Fuel Co	Cement, etc	4230	3 43
	Fish Stone Co	Steps and curbing	4231	35 34
	J. C. Hearn & Co	Brass fittings	4232	2 50
	Hammond & Sparhawk	Care of horse and laundry	4233	11 23
	Elliott & Maclean	4 doors	4234	8 00
	H. Braun Sons & Co	Drugs and surg. instruments.	4235	8 55
	Haussman & Dunn	Surgical instruments	4236	13 05
	Haussman & Dunn	"	4237	49 30
	Joe Dusong	Carpenter work	4238	27 00
	Schoedinger, Fearn & Co	Hardware	4239	14 36
	W. M. Taylor M. & G. Co.	Furniture	4240	27 05
	Minnie Rodgers	Typewriting	4241	5 20
	The Ruggles Gale Co	Stationery	4242	7 00
	J. W. Coulson & Co	Hdw., ptg. and glazing	4243	649 27

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 1	A. S. W. Huffman	Plumbing and gas fitting	4244	$61 08
	Minnie Rodgers	Typewriting	4245	33 60
	Col. Wire & Iron Wks	Screen	4246	36 50
	G. R. Butler & Co	Flag pole	4247	27 00
	H. C. Kennedy	Serv. as supt	4248	296 20
	A. F. Wilcox	Labor	4249	1 75
	C. L. Wattering	Grading	4250	10 50
	James Clark	Plastering	4251	12 00
	P. Hayden Sd. Hdw. Co.	Steel	4252	22 46
	E. A. Kinsey & Co	Apparatus	4253	14 30
	Case Mfg. Co	1 pulley	4254	3 25
	Blackwood, Green & Co	Shovels and brackets	4255	4 68
	Pickering Hdw. Co	Screws	4256	17 50
	A. S. W. Huffman	Plumbing, steam and gas fitting	4257	320 28
	J. W. Coulson & Co	Painting and varnishing	4258	8 40
	Krauss, Butler & B. Co.	Window shades	4259	63 45
	G. R. Butler & Co	Equipment Biol. Building	4260	4,227 22
	Saunders & Esswein	Equipment plumbing	4261	391 56
	E. J. McNamara	Ceiling shades	4262	6 00
	Bissell, Dodge & E. Co.	Merchandise	4263	1 10
	Col. Brass Co	"	4264	1 25
	Col. Supply Co	"	4265	2 36
	Cap. City Mch. Wks	"	4266	27 29
	M. P. Streett	Mason work and cement	4267	10 80
	W. E. Chappell	Labor	4268	56
	A. E. McIntosh	"	4269	3 68
	A. E. Loeb	"	4270	18 45
	M. C. Hunter	"	4271	1 38
	Kimball & Mathews	Paste, etc	4272	13 69
	Green, Joyce & Co	Towels	4273	6 50
	J. Carbutt	Lantern plates	4274	209 36
	Kauffman, Lattimer Co.	Chem. sup	4275	107 53
	W. C. Mills	Labor	4276	1 50
	Bausch & L. Opt. Co.	1 lens	4277	26 25
	F. O. Clements	Labor	4278	4 80
	Lucy Allen	"	4279	8 25
	Kny, Scheerer & Co.	Insect pins	4280	7 00
	Central Eectric Co	Merchandise	4281	9 50
	H. Goldsmith	Band supplies	4282	3 25
	The M. C. Lilley & Co	Flag, etc	4283	24 48
	C. P. Linhart	Incidentals	4284	2 75
	A. G. Spaulding & Bro.	Incline board	4285	6 00
	F. F. Bonnet	1 clock	4286	25 00
	Lily Weeks	Serv. as janitrix and clerk	4287	24 00
	D. C. Huddleson	Labor in gymnasium	4288	25 00
	F. L. Southworth	"	4289	2 75
	The Daily Fin. News	Advertising	4290	15 00
	Champlin Ptg. Co.	Printing	4291	47 25
	Webb Sta. & Ptg. Co.	1 book orders	4292	4 50
	O. S Journal Co	Advertising	4293	9 32
	E. E. Graham Co	Labor	4294	4 15
	Engelke & Bigelow	Freight and cartage	4295	51 53
	D. L. Auld	Copper	4296	25
	Schoedinger, Fearn & Co	Incidentals	4297	85

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 1	Talmadge Hdw. Co.	Hardware	4298	$3 73
	Blackwood, Green & Co.	Tin boxes	4299	3 90
	Cam. Bot. Sup. Co.	Pill boxes	4300	2 00
	Hager & Graves.	Groceries, etc.	4301	21 62
	Dunn, Tait & Co.	Dry goods	4302	8 52
	Miller Furn. Co.	Sideboard, etc.	4303	49 50
	Col. Pharm. Co.	Rubber sheeting	4304	90
	McAllister-Mohler Co.	Furniture	4305	14 75
7	J. G. Boyd	1/10 salary June inst., 1895	4306	25 00
	C. W. Burkett	" "	4307	75 00
	S. A. Norton	" "	4308	120 00
	A. F. Hall	Salary for May, 1898	4309	60 00
	W. F. Lavery	1/10 salary June inst., 1898	4310	70 00
	E. H. Bailey	Janitor service M. E. Hall, May, 1898	4311	18 83
	Leo Chase	Labor on Biol. building	4312	10 05
	Columbus Gas Co.	Gas	4313	129 53
8	C. B. Fredericks	1/10 salary for June inst., 1898	4314	25 00
9	F. D. Cope	Salary May 1 to 15, 1898	4315	25 00
10	E. L. Fullmer	Student assistance	4316	16 80
	Supplee Hardware Co.	1 Penn. mower	4317	6 81
	J. G. Ridinger	Labor	4318	1 75
	F. E. Fletcher	"	4319	8 38
	A. F. Wilcox	"	4320	13 05
	H. L. Belden	"	4321	4 13
	F. S. Aten	"	4322	1 87
	E. S. Ream	"	4323	5 38
	F. C. Kettler	"	4324	1 50
	J. C. Britton	"	4325	19 65
	W. Gilmore	"	4326	8 50
	J. C. Perry	"	4327	5 25
	J. Conrad	Repairs to lawn mower	4328	75
	W. H. Gilmore	Labor	4329	3 88
	R. Fitts	"	4330	4 50
	H. L. Belden	"	4331	5 63
	A. F. Wilcox	"	4332	4 50
	W. H. Page	1/10 salary June inst., 1897	4333	135 00
	H. W. Kuhn	" "	4334	40 00
	E. M. Van Harlingen	" "	4335	60 00
	F. O. Clements	" "	4336	20 00
	C. L. Arnold	" "	4337	85 00
	H. Judd	" "	4338	30 00
	G. W. Knight	" "	4339	325 00
	G. W. Knight	" "	4340	25 00
	T. K. Lewis	" "	4341	60 00
	J. N. Bradford	" "	4342	180 00
	W. L. Graves	" "	4343	80 00
	T. F. Hunt	" "	4344	250 00
	H. A. Weber	" "	4345	220 00
	A. M. Bleile	" "	4346	225 00
	W. A. Kellerman	" "	4347	225 00
	C. N. Brown	" "	4348	225 00
	A. C. Barrows	" "	4349	225 00
	Edward Orton	" "	4350	225 00
	E. A. Eggers	" "	4351	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 10	J. R. Smith	1/10 salary June inst., 1898	4352	$225 00
	W. R. Lazenby	" "	4353	225 00
	S. C. Derby	" "	4354	225 00
	R. D. Bohannan	" "	4355	225 00
	W. T. Magruder	" "	4356	225 00
	J. P. Gordy	" "	4357	225 00
	W. H. Scott	" "	4358	225 00
	A. F. Thomas	" "	4359	225 00
	B. L. Bowen	" "	4360	225 00
	A. L. Williston	" "	4361	225 00
	C. P. Linhart	" "	4362	160 00
	N. W. Lord	" "	4363	200 00
	W. F. Hunter	" "	4364	250 00
	E. B. Kinkead	" "	4365	100 00
	A. W. Hodgman	" "	4366	100 00
	D. F. Pugh	" "	4367	70 00
13	E. O. Randall	" "	4368	65 00
	F. F. D. Albery	" "	4369	15 00
	J. H. Collins	" "	4370	10 00
	Jean Blackford	Salary for June, 1898	4371	50 00
	Oliver Davie	Collection birds of N. A	4372	100 00
	G. B. Kauffman	1/10 salary June inst., 1898	4373	200 00
	Wm. McPherson	" "	4374	200 00
	F. A. Ray	" "	4375	200 00
	Edw. Orton, Jr	" "	4376	180 00
	G. W. McCoard	" "	4377	160 00
	H. C. Lord	" "	4378	150 00
	E. A. Hitchcock	" "	4379	150 00
	W. D. Gibbs	" "	4380	140 00
	P. G. Bowman	" "	4381	140 00
	F. C. Caldwell	" "	4382	140 00
	D. S. White	" "	4383	140 00
	R. I. Fulton	" "	4384	120 00
	Olive Jones	" "	4385	120 00
	J. C. Boyd	" "	4386	110 00
	C. E. Sherman	" "	4387	100 00
	T. E. French	" "	4388	100 00
	C. W. Mesloh	" "	4389	100 00
	F. C. Clark	" "	4390	100 00
	W. H. Siebert	" "	4391	100 00
	J. R. Taylor	" "	4392	100 00
	J. A Bownocker	" "	4393	90 00
	W. A. Knight	" "	4394	90 00
	C. W. Weick	" "	4395	90 00
	C. C. Sleffel	" "	4396	90 00
	C. W. Foulk	" "	4397	85 00
	K. D. Swartzel	" "	4398	85 00
	C. A. Dye	" "	4399	85 00
	J. S. Hine	" "	4400	85 00
	J. H. Schaffner	" "	4401	80 00
	C. Wissler	" "	4402	80 00
	C. A. Bruce	" "	4403	80 00
	F. Hahs	" "	4404	70 00
	E. E. Harrold	" "	4405	70 00
	A. E. Vinson	" "	4406	65 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 13	F. L. Landacre	1/10 sal. June inst., 1888	4407	$65 00
	Stella Elliott	" "	4408	60 00
	Harriet Townshend	" "	4409	55 00
	F. C. Kester	" "	4410	55 00
	Maude Jeffrey	" "	4411	50 00
	Gertrude Kellicott	" "	4412	50 00
	Theo. Griffin	" "	4413	40 00
	J. R. Spurrier	" "	4414	35 00
	M. Dresback	" "	4415	30 00
	J. H. Fox	" "	4416	30 00
	C. T. Morris	" "	4417	30 00
	J. F. Cunningham	" "	4418	30 00
	Robt. Fisher	" "	4419	20 00
14	C. B. Enlow	Sal. as Q. M., 3d term	4420	5 00
	A. V. Bleininger	1/10 sal. June inst., 1898	4421	20 00
	R. E. McIntosh	" "	4422	10 00
	W. E. Chappell	" "	4423	10 00
	H. Gamper	" "	4424	10 00
	K. Nurian	" "	4425	10 00
	E. E. Somermier	" "	4426	10 00
	J. H. Canfield	Salary for June, '98	4427	500 00
	Alexis Cope	" "	4428	187 50
	W. C. McCracken	" "	4429	125 00
	G. R. Rose	" "	4430	65 00
	W. R. Beattie	" "	4431	54 17
	Edith Cockins	" "	4432	54 17
	Chas. Low	" "	4433	54 17
	C. B. Hine	" "	4434	50 00
	A. Chantler	" "	4435	45 00
	Wm. Standley	" "	4436	45 00
	Benj Le Bay	" "	4437	45 00
	H. Martz	" "	4438	45 00
	Jas. Kelly	" "	4439	41 67
	I. H. Brown	" "	4440	40 00
	M. H. Cook	" "	4441	40 00
	J. M. Lain Smith	Exp. meetg. trustees May 25	4442	5 50
	W. I. Chamberlain	Exp. meetg. trustees, June 11-15	4443	24 45
	T. J. Godfrey	Exp. meetg. trustees, May 25 and June 13-15	4444	25 75
15	W. Whitestine	Salary for June, '98	4445	40 00
	D. D. Geren	" "	4446	40 00
	F. B. Brewer	" "	4447	40 00
	J. E. Adams	" "	4448	40 00
	J. Conrad	" "	4449	40 00
	Wash. Townsend	" "	4450	30 00
	W. Weir	" "	4451	20 00
	Void		4452	
16	D. C. Huddleson	Work in gymnasium	4453	3 37
	Void		4454	
	T. E. French	Lettering law certificates	4455	3 30
	Geo. Trowbridge	Carpenter work	4456	2 75
	F. S Johnston	Typewriting	4457	2 40
	W. Whitestine	Horse hire	4458	8 00
	W. F. Worcester	5 window panes	4459	70

STATEMENT II—Concluded.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 16	C. L. Fullmer	Student assistance	4460	$10 95
	Tallmadge Hdw. Co	1 pane glass	4461	2 00
	E. H. Bailey	Janitor	4462	3 68
16	Wm. McPherson	Stationery	4463	1 40
	Robt. Fischer	Extra serv. in chemistry	4464	5 00
	S. V. Peppel	Service in chemistry	4465	6 45
	Kelton & Converse	Lumber	4466	2 25
	E. M. Van Harlingen	Supplies department physio	4467	2 50
	The "Makio"	Adv. in the "Makio"	4468	60 00
	C. H. Woodruff	Carpenter work	4469	1 11
	Lucy Allen	Curator arch. museum	4470	20 00
17	Wm. Lawrence	Bac. address, honorarium	4471	50 00
18	C. W. Heatt	Honorarium com. address	4472	20 00
	H. Chantler	Salary for June, 1898	4473	40 00
	G. G. Leinbaugh	Repairing machinery	4474	12 90
	J. H. Lesh	114½ hours rep. machinery	4475	17 12
	W. H. Bradley	66 " "	4476	9 90
	A. L. Williston	Cash paid work in shops	4477	28 80
20	W. E. Lamb	Repair work in mch. shops	4478	11 32
21	J. T. Mack	Expense meeting June 12, 13, 14, 15	4479	26 44
	M. Zimmerman	Service as domestic	4480	4 00
22	Lily Weeks	Clerical work and janitrix	4481	2 00
	E. P. Hapgood	Work in blacksmith shop	4482	3 60
25	A. G. McCall	Salary for June, 1898	4483	20 00
20	F. W. Prentiss	" "	4484	33 34
28	Wm. Erdman	Work in shops	4485	17 58
30	G. G. Ball	Work in library	4486	21 67
	Total disbursements.			462,175 79

STATEMENT III.

List of Employes and Compensation.

In compliance with section 7 of the *Organic Act*, passed by the Legislature of Ohio May 1, 1878, (Bates Annotated Ohio Statutes, sec. 4105-41) which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Employes.	Position.	Salary.
James H. Canfield	President	$6,000 00
W. H. Scott	Professor of Philosophy	2,250 00
Edward Orton	" geology	2,250 00
W. R. Lazenby	" horticulture and forestry	2,250 00
Josiah R. Smith	" Greek language & literature.	2,250 00
Henry A. Weber	" agricultural chemistry	2,250 00
Benj. F. Thomas	" physics	2,250 00
Geo. W. Knight	" history and political science	2,250 00
R. Daniel Bohannan	" mathematics and astronomy	2,250 00
David S. Kellicott	" zoology and entomology	2,250 00
Ernst A. Eggers	" German language, literature	2,250 00
C. Newton Brown	" civil engineering	2,250 00
Albert M. Bleile	" anatomy and philosophy	2,250 00
Wm. A. Kellerman	" botany	2,250 00
Thos. F. Hunt	" agriculture	2,500 00
Samuel C. Derby	" Latin language, literature	2,250 00
Nathaniel W. Lord	" mining engineering	2,000 00
A. L. Williston	Director of industrial departments	2,250 00
Albert C. Barrows	Professor of English literature	2,250 00
Joseph V. Denney	" rhetoric and English language	2,250 00
Benj. L Bowen	" Romance languages	2,250 00
W. F. Hunter	Dean of law faculty	2,250 00
Geo. B. Kauffman	Professor of pharmacy	2,000 00
John P. Gordy	" pedagogy	2,250 00
Robt. I. Fulton	" elocution and oratory	1,200 00
Wm. T. Magruder	" mechanical engineering	2,250 00
John T. Martin	" military science	400 00
Edward Orton, Jr	Director school of ceramics	1,800 00
Frank A. Ray	Associate professor mining engineering	2,000 00
Jos. N. Bradford	Associate professor drawing	1,800 00
Wm. McPherson	Associate professor general chemistry	2,000 00
Geo. W. McCoard	Assistant professor mathematics	1,600 00
Sidney A. Norton	Lecturer in general chemistry	1,200 00
F. C. Caldwell	Associate professor physics	1,400 00
Henry C. Lord	Director observatory	1,500 00
C. E. Sherman	Assistant professor civil engineering	1,000 00
E. A. Hitchcock	Associate professor mech'l engineering	1,500 00
W. D. Gibbs	Assistant " agriculture	1,400 00
C. W. Mestoh	" " German	1,000 00
David S. White	Associate " veterinary medicine	1,400 00
Thos. E. French	Assistant in drawing	1,000 00
F. C. Clark	" professor of economics	1,000 00
Olive B. Jones	Librarian	1,200 00
Chas. W. Weick	Foreman carpenter shop	900 00
William A. Knight	" machine shops	900 00
C. C. Sleffel	" forge room	900 00
J. E. Boyd	Assistant professsor physics	1,100 00
Karl D. Swartzel	" mathematics	850 00
W. L. Graves	" rhetoric	800 00
Jas. S. Hine	" entomology	850 00
A. E. Vinson	" agricultural chemistry	650 00
E. M. Van Harlingen	" anatomy and physiology	600 00

LIST OF EMPLOYES AND COMPENSATION—Continued.

Employes.	Position.	Salary.
H. J. Noyes	Assistant professor dairy husbandry	$666 64
Frank Haas	Assistant in metallurgy and mineralogy	700 00
Arthur W. Hodgman	Assistant professor Greek and Latin	1,000 00
Chas W. Burkett	Assistant in agriculture	750 00
C. B. Hine	" horticulture	600 00
J. A. Bownocker	" geology	900 00
W. H. Siebert	Assistant professor history	1,000 00
C. L. Arnold	Assistant in mathematics	850 00
C. A. Dye	Assistant professor pharmacy	850 00
W. F. Lavery	Assistant in veterinary medicine	700 00
E. K. Harold	Storekeeper	700 00
C. B. Fredericks	Fellow in veterinary medicine	250 00
J. G. Boyd	Fellow in veterinary medicine	250 00
Thos. K. Lewis	Assistant in drawing	600 00
C. A. Bruce	" French	800 00
F. L. Landacre	" zoology	650 00
Theo. Griffin	" ceramics	400 00
C. W. Foulk	" general chemistry	850 00
Harriet Townshend	" library	550 00
F. E. Kester	" physics	550 00
J. H. Schaffner	" botany	800 00
Horace Judd	Fellow in mechanical engineering	300 00
J. R. Spurrier	Fellow and laboratory assistant in electrical engineering	350 00
Robert Fischer	Student assistant in chemistry	200 00
Edward T. Watson	" " "	200 00
Maud Jeffreys	Assistant in library	500 00
Gertrude Kellicott	" "	500 00
W. R. Beattie	Florist	650 00
C. P. Linhart	Director physical training	1,600 00
Perla G. Bowman	Assistant professor domestic science	1,400 00
J. R. Taylor	Assistant professor rhetoric	1,000 00
Clark Wissler	Assistant in philosophy and pedagogy	800 00
Stella Elliott	Gymnasium assistant	600 00
M. Dresbach	Fellow in anatomy and physiology	300 00
H. W. Kuhn	" mathematics	300 00
J. H. Fox	" ndustrial arts	300 00
J. F. Cunningham	" horticulture and forestry	300 00
E. E. Somermeier	Student assistant in chemistry	100 00
W. H. Page	Professor of law	1,350 00
E. B. Kinkead	"	1,000 00
D. F. Pugh	"	700 00
E. O. Randall	"	650 00
G. W. Knight	"	250 00
F. F. D. Alberry	Lecturer on law	150 00
J. H. Collins	"	100 00
John A. Shauck	"	100 00
Alexis Cope	Secretary	2,250 00
F. W. Prentiss	Treasurer	400 00
W. C. McCracken	Chief engineer	1,500 00
Chas. Low	Assistant engineer	650 00
Geo. R. Rose	Plumber	780 00
H. Martz	Watchman	540 00
William Whitestine	Janitor	480 00
James Kelley	Lawnkeeper	500 00
Jean Blackford	Executive clerk	600 00
Edith D. Cockins	Record clerk	650 00
Wm. Standley	Fireman	540 00

LIST OF EMPLOYES AND COMPENSATION—Concluded.

Employes.	Position.	Sala
Benj. LeBay	Fireman	$5
F. B. Brewer	Janitor	4
Wash Townsel	"	3
John E. Adams	"	4
John Conrad	"	4
Edward Stalter	"	2
Arthur Chantler	"	5
J. H. Brown	"	4
M. N. Cook	"	4
D. D. Geren	"	4
Jay A. Thompson	"	1
Mary Howells Cope	Clerk in office of Board of Trustees	6
C. Riddle	Janitor	2
R. E. McIntosh	"	1
W. E. Chappell	"	1
H. Gamper		1
K. Nurian		1
Wm. Weir	Elevator attendant	2

COLUMBUS, OHIO, September 21, 1898.

To the Board of Trustees of the Ohio State University:

The undersigned, the Finance Committee, have, in obedience to your instructions, examined the accounts and vouchers of F. W. Prentiss, the Treasurer of the University, for the period from July 1, 1897, to June 30, 1898, and carefully compared them with the vouchers in possession of the Secretary, and hereby certify that the report of the Treasurer submitted to the Board for the period named, which is the last fiscal year, is correct.

D. M. MASSIE,
J. MCLAIN SMITH,
T. J. GODFREY,
Finance Committee.

Report of Treasurer of the Ohio State University to the Secretary of Agriculture and the Secretary of the Interior, of amount received under act of Congress of August 30, 1890, in aid of Colleges of Agriculture and the Mechanic Arts, and of the disbursements thereof, to and including June 30, 1898.

Balance on hand July 1, 1897	$853 94
Date of receipt of installment for 1897–'98, July 19, 1897.....Amount...	23,000 00
Total available for year ending June 30, 1898	$23,853 94
Disbursements thereof for and during the year ending June 30, 1898:	
Agriculture, as per Schedule A	7,622 03
Mechanic Arts, as per Schedule B	6,828 23
English Language as per Schedule C	693 40
Mathematical Science, as per Schedule D	847 76
Natural or Physical Science, as per Schedule E	7,148 50
Economic Science, as per Schedule F	446 60
Total expended during year	$23,586 52
Balance remaining unexpended July 1, 1898	267 42

I hereby certify that the above account is correct and true, and, together with the schedules hereunto attached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their application in the industries of life and to the facilities for such instruction.

F. W. PRENTISS,
Treasurer.

SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction, during the year ended June 30, 1898.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
Thos. F. Hunt, Professor	Agriculture	$250 00
W. D. Gibbs, Asst. Prof.	"	140 00
C. W. Burkett, Assistant	"	75 00
H. I. Noyes, Asst. Prof.	Dairy husbandry	166 66
H. A. Weber, Professor	Agricultural chemistry	225 00
A. E. Vinson, Assistant	"	65 00
W. R. Lazenby, Professor	Horticulture	225 00
C. B. Hine, Assistant	"	50 00
John F. Cunningham, Fellow	"	30 00
D. S. White, Asst. Prof.	Veterinary medicine	140 00
W. F. Laverv, Assistant	"	70 00
J. G. Boyd, Fellow	"	25 00
C. B. Fredericks, Fellow	"	25 00

SCHEDULE A—Concluded.

	Amount.
II. For facilities as follows:	
Department of Agriculture.	
Repairs to machinery, $52.93; skeleton, $5.00; drugs and medicine, $2.74; fertilizers, $36.38; hardware and tools, $73.85; blacksmith, $108.85; harness, $45.70; machinery, $695.51; grinding corn, $6.00; instruments, $10.10; machine parts, $18.26; threshing, $31.55; boxes, $1.00; cows and pigs, $358.37; feed, $11.30; seeds, $7.76; gluten meal, $28.99; score cards, $11.25; scales, $215.34; equipment soil physics laboratory, Townshend Hall, $191.32; plumbing, equipment agricultural chemistry and dairy laboratories, $1,402.22; tank and gas, $6.25; wagon, $56.11; laboratory apparatus, $114.10; laboratory lantern and screen, $38.77; grain testers, $61.15; aerometers, $16.80; equipment soil physics laboratory, $121.25; steel share, $3.80	$3,780 65
Dairy School.	
Milk can and bottles, $11.93; milk, $341.02; engine, $250.00; machinery, $102.52; ice machine, $1,073.46	1,778 98
Department of Horticulture.	
Manure	60 00
Agricultural Chemistry.	
Chemicals	395 09
Department of Veterinary Medicine.	
Mattress, $5.95; halters, etc., $3.25; surgical instruments, $37.00; harness, $4.50; feed, etc., $36.90; mounting skeleton, $20.00; antitoxine, $23.05; hobbles, $40.00	170 65
Total	$7,622 03

SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for such instruction, during the year ended June 30, 1898.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
Edw. Orton, Jr., Professor	Ceramics	$180 00
Theo. L. Griffin, Assistant	"	40 00
C. N. Brown, Proffessor	Civil Engineering	225 00
C. E. Sherman, Assistant	"	100 00
J. N. Bradford, Associate Prof.	Drawing	180 00
T. E. French, Assistant	"	100 00
T. K. Lewis, Assistant	"	60 00
F. C. Caldwell, Assistant Prof.	Electrical Engineering	140 00
J. R. Spurrier, Assistant	"	35 00
A. L. Williston, Professor	Industrial Arts	225 00
W. A. Knight, Forem'n Mch.Shp.	" "	90 00
C. W. Weick, " Carp. "	" "	90 00
Chas. Sleffel, Foreman	" "	90 00
J. H. Fox, Fellow	" "	30 00
W. T. Magruder, Professor	Mechanical Engineering	225 00
E. A. Hitchcock, Assistant Prof.	" "	150 00
Horace Judd, Fellow	" "	30 00
N. W. Lord, Professor	Mining and Metallurgy	200 00
Frank Haas, Assistant	" "	70 00
Frank A. Ray, Assistant Prof	Mine Engineering	200 00
G. B. Kauffman, Professor	Pharmacy	200 00
C. A. Dye, Assistant	"	85 00

SCHEDULE B—Continued.

	Amount.
II. For facilities, as follows:	
Text-books and reference books	$58 98
Department of Industrial Arts.	
Repairs, machinery, $27.88; mach. parts, $7.20; wire benders, $1.70; pig copper, $3.90; hardware, $47.33; brass cast., $1.55; grinding tools, $2.75; B. P. paper, $1.00; lumber, $346.72; tools, $272.11; grind. machine, $25.00; shafting, $43.44; saw and blades, $18.75; shellers, $7.70; iron, $111.96; steel and brass, $17.56	936 55
Department of Civil Engineering.	
Hardware, $3.04; Dr. tables, $8.50; cur. meter, $144.50; cent. timer, $6.00; B. P. frame, etc., $39.00; bat. zinc, $19.15; repair instrument, $11.12; tools and instruments, $199.11	430 42
Department of Mechanical Engineering.	
Pipe and fittings, $188.24; hardware, $65.76; lumber, $50.88; rep'r machine, $9.00; instruments, $81.33; shafting, etc., $24.55; galvanometer, $30.50; apparatus, $20.50; standpipe, $60.00; cistern, $74.50; indicators, $51.31; fitting lab. machine, $98.21; Rem. heater, $5.00; steam trap, $21.00; steel box, $8.75; valves, $35.79; Red. wheel, $16.50; freight on machinery, $86.98; steel points, $5.00; pulleys and belts, $36.88; timer, $4.00; gauges, $67.78; iron, $3.60; slate, $2.00; gas engine indicator, $77.65; meter, $15.00; counters, $90.73	1,231 44
Department of Ceramics.	
G. I. Cans, $21.13; specimen boxes, $1.70; labor on kiln, $48.54; instruments, etc., $117.55; coke, $11.00; flanges, etc., $24.85; gaskets, $4.30; gasoline, $24.51; feldspar, $25.00; flint, $20.47	299 55
Department of Drawing and Photography.	
Photo. supplies, $191.06; charts, $12.00; plate holders, $30.00; electric lamp, $11.25	244 31
Department of Electrical Engineering.	
Des'g spring, $2.09; work on app., $2.62; voltmeter, $179.76; jars, $7.85; platinum wire, $108.87; balances, $84.00; wire braid, $6.27; cells, $29.35; instruments, $121.88; pulleys, belting, etc., $10.63; T. H. receiver, $3.50	556 82
School of Mines.	
Time cards, $3.60; switches, $26.55; silver protractor, $9.00; castings, $3.25; steel tape, $15.00; chem. supplies, $267.76	325 16
Total	$6,828 23

SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction, during the year ended June 30, 1898.

Name of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
A. C. Barrows, Professor	English Literature	$225 00
Jos. V. Denney, "	English Language & Rhetoric	225 00
J. R. Taylor, Assistant	" "	100 00
W. R. Graves, "	" "	80 00

SCHEDULE C—Continued.

	Amount.
II. For facilities, as follows:	
Text-books and reference books	$63 40
Total	$693 40

SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction, during the year ended June 30, 1898.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
R. D. Bohannan, Professor	Mathematics	$225 00
G. W. McCoard, Asst. Prof.	"	160 00
C. L. Arnold, Assistant	"	85 00
K. D. Swartzel, Assistant	"	85 00
H. W. Kuhn, Fellow	"	30 00
H. C. Lord, Director Observatory	" and astronomy	150 00

SCHEDULE D—Continued.

	Amount.
II. For facilities, as follows:	
Text books and reference books	$37 25
Battery zinc, $8.44; elec. apparatus, $30.50; apparatus, $30.50; photo plates, $6.07	75 51
Total	$847 76

SCHEDULE E.

Disbursements for instruction in Natural or Physical Science and for facilities for such instruction, during the year ended June 30, 1898.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
A. M. Bleile, Professor	Anatomy and physiology	$225 00
E. M. Van Harlingen, Assistant	"	60 00
M. Dresbach, Fellow	"	30 00
W. A. Kellerman, Professor	Botany	225 00
J. H. Shaffner, Assistant	"	80 00
W. R. Beattie, Florist	"	50 00
Wm. McPherson, Asso. Prof	Chemistry	200 00
S. A. Norton, Lecturer	"	120 00
C. W. Foulk, Assistant	"	85 00
Robert Fisher, Fellow	"	20 00
F. O. Clements, Fellow	"	20 00
Edw. Orton, Professor	Geology	225 00
J. A. Bownocker, Assistant	"	90 00
B. F. Thomas, Professor	Physics	225 00
J. E. Boyd, Assistant	"	110 00
F. E. Kester, Assistant	"	50 00
D. S. Kellicott, Professor	Zoology and entomology	225 00
J. S. Hine, Assistant	"	85 00
F. L. Landacre, Assistant	"	65 00

SCHEDULE E—Continued.

	Amount.
II. For facilities as follows:	
Text-books and reference books	$23 65
Department of Anatomy and Physiology.	
Microscopes, $251.31; instruments, $2.60; objectives, $7.20	261 11
Department of Botany.	
Microscopes, $407.48; work on herb. and coll., $109.83; tools, etc., $5.71; hardware, etc., $26.71	549 73
Department of Geology.	
Specimens, $123.22; work on coll., $100.00; labels, $14.50	237 72
Department of Physics.	
Induction coil, $142.15; instruments, $137.29; belting, $5.00; dynamo, $45.00	329 44
Department of Chemistry.	
Labor, $21.60; dist. water app., $151.30; chemical supplies and app. $2,993.76; balances, $102.10; instruments, $30.60; plat. crucible, $64.03	3,363 39
Department of Zoology.	
Specimens, $20.50; diss. boxes, $3 65; objectives, $97.95; bottles and cans, $51.38; labels, $9.30; material for diss. $10.68	193 46
Total	$7,148 50

SCHEDULE F.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
Geo. W. Knight, Professor.....	History and Political Science ...	$225 00
F. C. Clark, Asst. Professor.....	Economics and Sociology.....	100 00
W. H. Siebert, Asst. Professor ...	History and Political Science.....	100 00

SCHEDULE F—Continued.

	Amount.
II. For facilities as follows:	
Text-books and reference books.....	$21 60
Total	$446 60

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University Bulletins Series 4, Number 1

OHIO STATE UNIVERSITY

TWENTY-EIGHTH ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

TO THE

GOVERNOR OF OHIO

FOR THE

Year Ending June 30, 1898

PART II

The State has no material resources at all comparable with its citizens, and no hope of perpetuity except in the intelligence and integrity of its people.

Entered at the Postoffice at Columbus, Ohio, as Second-Class Matter

COLUMBUS
PUBLISHED BY THE UNIVERSITY
1899

University Bulletins. Series 4, Number 1.

OHIO STATE UNIVERSITY.

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JANUARY, 1899.

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PUBLIC LIBRARY
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
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CALENDAR

1898

JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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1899

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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Days and Dates

1898

Thanksgiving Recess	Thursday,	November 24.
	Friday,	November 25.
First term ends	Wednesday,	December 21.
Christmas Vacation.		

1899

Second Term begins	Wednesday,	January 4.
First Semester (College of Arts, Philosophy and Science) ends	Friday,	February 3.
Second Semester (College of Arts, Philosophy and Science) begins	Monday,	February 6.
University Day	Wednesday,	February 22.
Second Term ends	Friday,	March 24.
Third Term begins	Monday,	March 27.
Spring Recess.		
Meeting of Trustees	Wednesday,	April 5.
High School Day	Friday,	May 19.
Senior Vacation begins	Saturday,	May 20.
Field Day—Atheletic Association	Saturday,	May 20.
Memorial Day	Tuesday,	May 30.
Competitive Drill, Cadet Battalion	Saturday,	June 3.
Final Examinations (all Colleges)	Monday to	June 5.
	Friday,	June 9.
Baccalaureate Sermon	Sunday,	June 11.
Entrance Examinations (8 A. M.)	Monday,	June 12.
	Tuesday,	June 13.
Class day	Monday,	June 12.
Meeting of Trustees	Tuesday,	June 13.
Alumni Day	Tuesday,	June 13.
COMMENCEMENT	Wednesday,	June 14.
Summer Vacation.		
Entrance examination (8 A. M.)	Monday,	September 11.
	Tuesday,	September 12.
Registration	Wednesday,	September 13.
Lectures and Class-work begin (all Colleges)	Thursday,	September 14.
Meeting of Trustees	Wednesday,	September 27.

Board of Trustees

1898-1899

		Term Expires
WM. I. CHAMBERLAIN	Hudson	May 13, 1899
DAVID M. MASSIE	Chillicothe	" 1900.
JOHN T. MACK	Sandusky	" 1901.
LUCIUS B. WING	Newark	" 1902.
THOMAS J. GODFREY	Celina	" 1903.
J. McLAIN SMITH	Dayton	" 1904.
PAUL JONES	Columbus	" 1905.

Officers of the Board

WM. I. CHAMBERLAIN	President.
J. McLAIN SMITH	Vice President.
ALEXIS COPE	Secretary.
FRED W. PRENTISS	Treasurer.

Committees of the Board

EXECUTIVE	FARM	FINANCE
L. B. WING	J. McLAIN SMITH	D. M. MASSIE
T. J. GODFREY	L. B. WING	T. J. GODFREY
PAUL JONES	JOHN T. MACK	J. McLAIN SMITH

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY	WM. I. CHAMBERLAIN	JOHN T. MACK

THE FACULTIES

Members of the Faculties, and Other Instructors

1897-1898

JAMES HULME CANFIELD.....University Ground

President

A. B., Williams, 1868; A. M., Williams, 1877; LL. D., Williams, 1893. Railroad construction, 1868-1872; Practicing Attorney, 1872-'77; Superintendent of Schools, St. Joseph, Michigan, 1874-'77; Professor of History and English Literature, State University of Kansas, 1877-'84; Professor of History and Political Science, State University of Kansas, 1884-'87; Professor of American History and Civics, State University of Kansas, 1887-'91; Chancellor of the University of Nebraska, 1891-'95; present position since 1895.

EDWARD ORTON.....100 Twentieth street

Professor of Geology, and State Geologist

A. B., Hamilton, 1848; Ph. D., Hamilton, 1875; LL. D., Ohio State University, 1881. Student of Theology, Lane Seminary, 1849; Student at Lawrence Scientific School, Harvard University, 1852; Student, Andover, 1854; Professor of Natural Science, State Normal School, Albany, N. Y., 1856-'59; Principal, Chester Academy, N. Y., 1859-'65; Professor of Natural History, Antioch, 1865-'72; President of Antioch, 1872-'73; President of the Ohio State University, 1873-'81; State Geologist, 1869; present position since 1881.

WILLIAM HENRY SCOTT.....131 Fifteenth avenue

Professor of Philosophy

A. B., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1894. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of the Ohio University, 1864-'65; Pastor of Main Street M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

SIDNEY AUGUSTUS NORTON.....363 East Town street

Lecturer in Chemistry

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon 1878; LL. D., Wooster, 1881. Student at Bonn, Leipsic, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; present position since 1895.

NATHANIEL WRIGHT LORD.....338 West Eighth avenue

Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering

E. M., Columbia 1876. Present position since 1878.

SAMUEL CARROLL DERBY.....93 Fifteenth avenue

Professor of Latin, and Dean of the College of Arts, Philosophy and Science

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Language, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, John Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

WILLIAM RANE LAZENBY.....807 West Sixth avenue

Professor of Horticulture and Forestry

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887. Instructor Horticulture and Botany, Cornell, 1874-'77; Assistant Professor of Horticulture, Cornell, 1877-'81; Lecturer, N. Y. State Grange, 1874-'81; Director Ohio U. S. Experiment Station, 1882-'84; Professor of Botany and Horticulture, Ohio State University, 1881-'92; present position since 1892.

JOSIAH RENICK SMITH.....950 Madison avenue

Professor of the Greek Language and Literature

A. B., Amherst, 1871; A. M., Amherst, 1883. Principal, Mound Street School, Columbus, 1871-'73; Teacher, Columbus High School, 1873-'1876; Assistant Professor of Ancient Languages, Ohio State University, 1876-'81; Student at Leipsic, 1881-'83; present position since 1883.

HENRY ADAM WEBER.....1342 Forsythe avenue

Professor of Agricultural Chemistry

Graduate of Polytechnic School, Kaiserslautern, 1866; Student, Chemistry under Von Leibig and Reischner, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879. Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, Illinois State University, 1874-'82; present position since 1884.

BENJAMIN FRANKLIN THOMAS.....University Grounds

Professsr of Physics, and State Sealer of Weights and Measures

B. Sc., Ripon, 1874; M. Sc., Ripon, 1877; Ph. D., Stevens Institute, 1880. Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-'79; Professor of Physics, University of Missouri, 1880-'85; engaged in electrical test work at the International Electrical Exhibition at Philadelphia, 1884, and at the World's Columbian Exhibition, Chicago, 1893; present position since 1885.

GEORGE WELLS KNIGHT.....University Grounds

Professor of History and Political Science and of Constitutional and Private International Law

A. B., University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884. Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Student at Universities of Halle, Berlin, and Freiburg, 1889-'90; present position since 1887.

ROSSER DANIEL BOHANNAN.....Sixteenth and Indianola avenues

Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876. Student of Mathematics and Physics, Cambridge, England, 1880-'82; Gottingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emery and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant Professor in Mathematics and Physics, University of Virginia, 1884-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1895.

*DAVID SIMONS KELLICOTT.....1332 Highland street

Professor of Zoology and Entomology

B. Sc., University of Syracuse, 1869; Ph. B., Syracuse 1874; Ph. D, Syracuse, 1881. Teacher of Mathematics, Keystone State Normal School, 1870-'71; Teacher of Natural Sciences, Buffalo State Normal School, 1873-'88; Teacher of Botany, College of Pharmacy, Buffalo, 1886-'88; Professor of Zoology and Comparative Anatomy, Ohio State University, 1888-'91; present position since 1891.

C. NEWTON BROWN.....1343 Forsythe avenue

Professor of Civil Engineering

C. E., Miami, 1886. Resident Engineer of the Ironton Extension of the Pittsburgh, Cincinnati, Chicago & St. Louis R. R., 1881; Ohio Geological Survey, 1882; Assistant in Mathematics and Civil Engineering, Ohio State University, 1883-'1885; Associate Professor of Civil Engineering, Ohio State University, 1885-'90; present position since 1890.

*Deceased.

ERNST AUGUST EGGERS.....University Grounds

Professor of Germanic Languages and Literatures

Student in Gymnasium at Hanover, the Sorbonne, College de France; at Michigan State Normal School. Instructor in German in the High Schools of Wisconsin and Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

ALBERT MARTIN BLEILE.....218 King avenue

Professor of Anatomy and Physiology

M. D., Starling Medical College, 1876. Student, Vienna, Chemistry and Physiology, 1876-'77; Student, Physiology, Leipsic, 1877-'78; Student Anatomy and Histology, Paris, 1878-'79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

WILLIAM ASHBROOK KELLERMAN.....175 Eleventh avenue

Professor of Botany

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881. Professor of Natural Science, Wisconsin State Normal School, 1874-'79; Professor of Botany and Horticulture, Kentucky State College, 1881-'82; Professor of Botany and Zoology, Kansas State Agricultural College, 1883-'87; Professor of Botany, Kansas State Agricultural College, 1888-'91; Botanist, Kansas State Board of Agriculture, 1883-'91; Founder and first Editor of *Journal of Mycology*: present position since 1891.

THOMAS FORSYTH HUNT.....188 West Tenth avenue

Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science

B. Sc., University of Illinois, 1884; M. Sc, University of Illinois, 1892. Assistant to Illinois State Entomologist, 1885-'86; Assistant in Agriculture, University of Illinois, 1886-'88; Assistant Agriculturalist, Illinois Experiment Station, 1888-'91; Professor of Agriculture, Pennsylvania State College, 1891-'92; present position since 1892.

***ARTHUR LYMAN WILLISTON**.....652 Franklin auenue

Director of the Department of Industrial Arts

S. B., Massachusetts Institute of Technology, 1889. Railroad Engineering, two years: Instructor in Thermodynamics and Steam Engineering, Massachusetts Institute of Technology, 1891-'92; present position since 1893.

GEORGE BEECHER KAUFFMAN.....University Grounds

Professor of Pharmacy, and Dean of the College of Pharmacy

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio., 1894. Associate Professor of Pharmacy, Ohio State University, to 1894. Present position since 1894.

BENJAMIN LESTER BOWEN.....46 Jefferson avenue

Professor of Romance Languages and Literatures

A. B., University of Rochester, 1881; Ph. D., Johns Hopkins University, 1888. Professor of Languages, New Windsor College, Maryland, 1882-'83; Graduate Student and Assistant in French, Johns Hopkins University, 1884-'86, and 1887-'88; Student at the Universities of Paris, Bonn, Rome and Madrid, 1885-'86 and 1886-'87; Professor of French and Latin, Bowdoin College, 1888-'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889-'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890-'94; present position since 1894.

JOSEPH VILLIERS DENNY.....The Dennison

Professor of Rhetoric and the English Language, and Secretary of the University Faculty

A. B. University of Michigan, 1885. Journalist, 1885-'88; Principal of the Aurora (Illinois) High School, 1888-'90; Instructor in English and Graduate Student, University of Michigan, 1890-'91; Associate Professor of Rhetoric, Ohio State University, 1891-'94; present position since 1894.

ALLEN CAMPBELL BARROWS.....15th and Indianola avenues

Professor of English Literature

A. B. Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889. Teacher, Latin and Greek, Phillips Academy, 1865-'66; Professor of Physics, Western Reserve, 1866-'70; Professor of Latin and English Literature, Western Reserve, 1870-71; Professor of English Literature and History, Iowa Agricultural College, 1887-'94; present position since 1894.

*Resigned.

EDWARD ORTON, JR The Normandie

Director of the Department of Clay-Working and Ceramics

E. M., Ohio State University, 1884. Assistant to Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885-'86; Superintendent of Bessie Furnace, 1887-'88; Chemist, Iron Works, Homestead, Pennsylvania, 1891; present position since 1894.

JOHN THOMAS MARTIN.....1194 Fair avenue

Professor of Military Science and Tactics

Graduated from West Point, with rank of Second Lieutenant, U. S. Artillery, 1889. Promoted to Rank of First Lieutenant, 5th Artillery, U. S. A., 1896. Appointed to present position, Commandant of University Battalion, September, 1895.

ROBERT IRVING FULTON Delaware, Ohio

Professor of Elocution and Oratory

A. M., Ohio Wesleyan University, 1887. Law Student, University of Virginia, 1877; Superintendent Public Schools, Berlin, Ill., 1877-'78; Associate Principal, School of Oratory, Kansas City, Mo., 1878-'81, and Director of same, 1884-'92; Instructor, Elocution, Ohio Wesleyan, Missouri State, and Kentucky State Universities, 1882-'90; Assistant Professor, English Department, Kansas State University, 1890-'91; Professor of Elocution and Oratory, Ohio Wesleyan University, since 1891; Lecturer, Elocution and Oratory, Ohio State University, 1892-'95; present position since 1895.

WILLIAM FOREST HUNTER.....1032 Bryden Road; 18 Board of Trade

Dean of the College of Law, Professor of the Law of Sales, Bailments, Evidence, Mortgages, Wills, Suretyship, Construction of Contracts, Law of Corporations Judge of Moot Courts

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892-'96; present position since 1896.

WILLIAM THOMAS MAGRUDER.....329 West Eighth avenue

Professor of Mechanical Engineering

M. E., Stevens Institute of Technology, 1881. Student in Machine Design and Shop Practice, Taunton, Mass, 1881-'86 and in Chemistry and Mathematics, etc., Johns Hopkins University, 1886-'87; Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887-'96; Present position since September, 1896.

J. P. GORDY.....The Normandie

Professor of Education

Ph. D., University of Leipsic, 1884. LL. D., Western University of Pennsylvania, 1897. Student in Philosophy at Leipsic, 1883-'84; Student in Philosophy at Johns Hopkins University, 1886; Assistant in Revision of Webster's Dictionary, 1884-'85; Professor of Philosophy and Pedagogy, Ohio University, Athens, 1886-'96. Translator of the first two volumes of Kuno Fischer's History of Modern Philosophy; Editor of the Journal of Pedagogy, 1887-'90; "Lessons in Psychology," "The Training of Teachers in the United States," "History of Political Parties in the United States." Present position since September, 1896.

WILLIAM McPHERSON, JR.....97 Hamilton avenue

Professor of Chemistry

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State University, 1895. Instructor in Chemistry and Physics, Toledo High School, 1887-'89; Instructor in Chemistry, Toledo High School and Manual Training School, 1889-'92; Assistant in Chemistry, Ohio State University, 1892-'93; Assistant Professor in Chemistry, Ohio State University, 1893-'95; Associate Professor, General Chemistry, Ohio State University, 1895-'97; present position since 1897.

DAVID FRANKLIN PUGH.....1320 Highland street; Board of Trade

Professor of Equity Jurisprudence and Law of Real Property

Member of West Virginia Constitutional Convention, 1872; Member of Legislature, West Virginia, 1874-'75; Prosecuting Attorney, Tyler County, West Virginia, 1870-'80; Common Pleas Judge, Franklin County, Ohio, since 1887. Present position since 1891.

EMLUS OVIATT RANDALL 1025 Oak street; Supreme Court Room

Professor of Agency, Commercial Law and Partnership

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892. Admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter, Supreme Court of Ohio. Present position since 1893.

EDGAR BENTON KINKEAD. Wyandotte avenue; Board of Trade

Professor of Pleading and Probate Practice, Torts, Criminal Law, Ethics, Trial Practice and Law of Contracts (Engineers)

Author of "Code Pleading;" Editor of *Ohio Law Journal.* Present position since 1895

WILLIAM HERBERT PAGE.....The Vendome; 27 Board of Trade

Professor of Elementary Law, Contracts and Wills

B. A., Yale, 1889; LL. B., Ohio State University, 1892; LL. M., same institution, 1894. Instructor in Central High School, Columbus, Ohio, 1889-'96. Present position since September, 1896.

CHRISTOPHER P. LINHART.....The Great Southern; The Vendome

Director of the Gymnasium, and Instructor in Physical Education

M. D., Western Reserve University, Cleveland, 1882. Post-graduate student, same institution, 1882-83. Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1885-86; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86 and Assistant Visiting Physician Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark, (N. J.), Academy, 1887 and 1890, and Director of Physical Education Newark, N. J., Public Schools, 1888-90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-97. Present position since 1897.

JOSEPH NELSON BRADFORD.....54 West Tenth avenue

Associate Professor of Drawing

M. E., Ohio State University, 1883. Draftsman, Ohio Geological Survey, 1882; Machinist and Draftsman, Pittsburg, Cincinnati & St. Louis Railroad, 1883-85; Assistant in Mechanical Engineering and Drawing, Ohio State University, 1885-90; Assistant Professor of Drawing, Ohio State University, 1890-'93. Present position since 1893.

HENRY CURWEN LORD.....401 West Sixth avenue

Director of the Emerson-McMillin Observatory, and Associate Professor of Astronomy

B. Sc., University of Wisconsin, 1889. Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891-'94; elected Fellow, Royal Astronomical Society, 1897. Present position since 1895.

DAVID STUART WHITE.....West Fifth avenue

Associate Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine

D. V. S., Ohio State University, 1890. Student, Royal Veterinary Schools of Hanover, Berlin and Dresden, 1890-'91; at Imperial Veterinary Institute of Vienna, 1891-'93; Assistant in Veterinary Medicine, Ohio State University, 1893. Present position since 1895.

FRANK ARNOLD RAY.....The Dennison

Associate Professor of Mine Engineering

M. E., Ohio State University, 1887. Since then engaged in various lines of work coming within the range of Mine Engineering; Assistant Professor of Mine Engineering, Ohio State University, 1895-'96. Present position since 1896.

FRANCIS CARY CALDWELL.....380 West Eighth avenue

Associate Professor of Electrical Engineering

A. B., Cornell, 1890; M. E. Cornell, 1891. With Thompson-Houston Works, Lynn, Mass., 1891-'92; Student at the National Polytechnic, Zurich, 1892-'93; Assistant Professor of Physics, Ohio State University, 1893-'97. Present position since 1897.

PERLA G. BOWMAN The Dennison

Associate Professor of Domestic Science

Graduate of Toledo High School; Graduate of Toledo Manual Training School; Student at Wells College; Instructor in Toledo Manual Training School; Director of Domestic Science, Toledo Manual Training School; Special Student at Pratt Institute (Brooklyn), and the University of Michigan. Present position since September, 1897.

OLIVE B. JONES 53 Eleventh avenue

Librarian

Assistant Librarian, 1887. Student, Library Science, Amherst, summer of 1892. Present position since 1893.

EMBURY ASBURY HITCHCOCK 380 West Eighth avenue

Associate Professor of Experimental Engineering

M. E., Cornell, 1890. Straightline Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State University, 1893-'95; Assistant Professor, Experimental Engineering Ohio State University, 1895-'97; Present position since 1897.

GEORGE WASHINGTON McCOARD 40 West Third avenue

Assistant Professor of Mathematics

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882. Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873-'74; Private Tutor in Cleveland, Ohio, 1874-'80; Principal of Public Schools, Irving Park, Chicago, 1880-'81; Teacher of Latin and Mathematics, Columbus High School, 1881-'82; Assistant in Mathematics and Latin, Ohio State University, 1882-'87. Present position since 1887.

WILBUR HENRY SIEBERT 1332 Highland street

Assistant Professor of History

A. B., Ohio State University, 1888; A. B. (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890. Student, Freiburg and Berlin, 1890-'91; Student, Harvard, 1895; Assistant in History and Political Science, Ohio State University, 1891-'93; Assistant Professor of History, Ohio State University, 1893-'95; Student, Harvard University, 1895-'97.

CHARLES WALTER MESLOH University Grounds

Assistant Professor of German

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895. Student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Teacher of German, Ohio State University, since graduation.

WILLIAM DAVID GIBBS 319 West Fifth avenue

Assistant Professor of Agriculture

B. Sc., University of Illinois, 1893. Fellowship in Agriculture, University of Illinois, 1893-'94; Post-graduate work, University of Illinois and University of Wisconsin, 1895; Expert Assistant in Division of Agricultural Soils of the United States Department of Agriculture, summer of 1895; Teacher of Bacteriology, University of Illinois, fall term, 1893; Assistant in Animal Husbandry, University of Illinois, winter term, 1894; Assistant in Agriculture, Ohio State University, spring and fall terms, 1895. Present position since 1895.

HERBERT JAMES NOYES Richland City, Wisconsin

Assistant Professor of Dairy Husbandry

President, National Butter and Cheese Makers' Association, 1891: Chief Instructor, Wisconsin Dairy School, 1892-'94; Instructor, Wisconsin Dairymen's Association, 1894. Present position since 1895.

FREDERICK CONVERSE CLARK Indianola avenue

Assistant Professor of Economics and Sociology

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891. Student at Halle and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Economy, Stanford University, 1892-'93. Present position since 1895.

JAMES STEWART HINE.....248 West Fourth avenue

Assistant Professor of Entomology

B. Sc. (H. and F.) Ohio State University, 1893. Student in Entomology, Cornell, 1895. Present position since 1895.

JAMES ELLSWORTH BOYD.....25 Maynard avenue

Assistant Professor of Physics

B. Sc., Ohio State University, 1891; M. Sc., Cornell, 1896. Student in Physics and Mathematics, Ohio State University, 1893-'95; Student in Experimental and Theoretical Physics, Cornell, 1895-'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1895. Assistant in Physics, Ohio State University, 1891-'95; held scholarship in Physics, Cornell, 1895. Present position since September, 1896.

JOSEPH RUSSELL TAYLOR.....86 King avenue

Assistant Professor of Rhetoric and English Language

B. A., Ohio State University, 1887. Taught in Township Schools, Madison County, Ohio, 1887-'88; Assistant in Drawing, Ohio State University, 1889-'94; Student, English, Columbia, 1896-'97; M. A., Columbia, 1897; Assistant in Rhetoric, Ohio State University, 1894-'97. Present position since 1897.

CLAIR ALBERT DYE.....169 King avenue

Assistant in Pharmacy

G. Ph., Ohio State University, 1891. Post-graduate student in Chemistry and Pharmacy, Ohio State University; Assistant in Chemistry and Pharmacy, 1890-'94. Present position since 1894.

CHRISTOPHER ELIAS SHERMAN.....772 Oak street

Assistant Professor of Civil Engineering

C. E., Ohio State University, 1894. Engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years, during college course; also engaged in railroad, geological and governmental engineering work. Present position since September, 1896.

WILLIAM LUCIUS GRAVES.....1313 Forsyth avenue

Assistant Professor of Rhetoric

B. A., Ohio State University, 1893. Principal, High School, Coshocton, 1894-'95; Fellow, and Assistant in Rhetoric and English Language, Ohio State University, 1895-'96 Present position since 1896.

ARTHUR WINFRED HODGMAN.....164 West Ninth avenue

Assistant Professor of the Classic Languages

A. B., Harvard, 1890; A. M. Harvard, 1893; Ph. D. (Classical Philology) Harvard, 1896. Student in Graduate School, Harvard, Classical Philology, 1892-'96. Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1896-'97. Present position since September, 1897.

STELLA M. ELLIOTT.....54 West Tenth avenue

Assistant Director of the Gymnasium

Student, University of Nebraska three years; Chautauqua School of Physical Education, summer of 1897; Assistant in Physical Training, University of Nebraska two years; Y. M. C. A. classes in Physical Training, Lincoln, Nebraska, one year, and in Aurora, Illinois, one year.

PAUL JONES.....1194 Bryden Road; 2 Hayden Building

Lecturer on the Law of Contracts

B. A., Ohio State University, 1880. Present position since 1891.

FAXON FRANKLIN DUANE ALBERY.....37 Lexington avenue; 119½ S. High street

Lecture on the Law of Insurance

Student of Law and Philosophy in the University of Berlin and the University of Leipsic. Present position since September, 1896.

JAMES HENRY COLLINS.....57 Lexington avenue: Ruggery Building

Lecturer on Federal Practice

In practice for thirty years. Present position since 1891.

JOHN ALLEN SHAUCK.....Columbus Club: Supreme Court Room

Lecturer on Supreme Court Practice and Special Cases

B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M. Otterbein University 1870; LL. D., Otterbein University, 1897. Judge of the Supreme Court of Ohio.

CHARLES LINCOLN ARNOLD.....334 West Eighth avenue

Assistant in Mathematics

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894. Post graduate Student, University of Chicago and Ohio State University, 1894-'95. Present position since 1890.

THOMAS EWING FRENCH.....435 East Naughton street

Assistant in Drawing

M. E., Ohio State University, 1895. Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Vaile Company, Dayton. 1888-'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888-'91; Chief Draftsman, The Smith-Vaile Company, Dayton, 1891. Present position since 1891.

CHARLES WILLIAM WEICK.....51 East Eighth avenue

Assistant in the Industrial Department and Foreman of the Carpenter and Pattern Shops

B. Sc., Industrial Arts, Ohio State State University, 1898. Student, Cornell University, summer 1898; Foreman in pattern shops Buffalo Forge Co., Buffalo, N. Y., 1881-'88; Johnson Steel Co., Johnstown, Pa., 1888-'89; Draftsman Buffalo Forge Co., Buffalo, N. Y., 1889-'92; Chief Draftsman and Designer, Horner Machine Co., Holyoke, Mass., 1892-'93. Present position since 1893.

WILLIAM ABNER KNIGHT.....206 West Lane avenue

Assistant in the Industrial Department and Foreman of the Machine Shops

Present position since 1893.

KARL DALE SWARTZEL.....57 East Eighth avenue

Assistant in Mathematics

B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894. Fellow and Assistant in Mathematics, Ohio State University, 1894-'95. Present position since 1895.

THOMAS KENYON LEWIS.....68 East Seventh avenue

Assistant in Drawing

B. Sc., Ohio State University, 1894. Graduate Student, Ohio State University, 1894-'95. Present position since graduation.

CHARLES A. BRUCE.....234 West Tenth avenue

Assistant in French

B. A., Ohio State University, 1895. Student of French, Amherst, 1895. Present position since graduation.

JOHN ADAMS BOWNOCKER.....1594 Neil avenue

Assistant in Geology

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897. Principal of High School, Martin's Ferry, 1889-'92; Fellow in Geology, University of Chicago, 1892-'94; Graduate Scholar, Yale University, 1894-'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1893. Present position since 1895.

FRANCIS LEROY LANDACRE.....70 West Tenth avenue

Assistant in Zoology

B. A., Ohio State University, 1895. Present position since graduation.

WILLIAM FINLEY LAVERY.....North Dormitory

Assistant in Veterinary Medicine

D. V. M., Ohio State University, 1890. Veterinary practitioner, 1892-'96. Present position since 1896.

FRANK HAAS.....283 Eleventh avenue

Assistant in Metallurgy and Mineralogy

C. E., Ohio State University, 1895; E. M., Ohio State University, 1896. Present position since graduation.

***WILLIAM LLOYD EVANS**.....189 Jefferson avenue

First Assistant Director, Clay-Working and Ceramics

B. Sc., Ohio State University, 1892; M. Sc., Ohio State University, 1896. Assistant Chemist, American Encaustic Tiling Company, Zanesville, Ohio, 1892--'94; Graduate Student, Ohio State University, 1895; Fellow in Chemistry, Ohio State University, 1895--'96. Present position since 1896.

CHARLES CONRAAD SLEFFEL.....174 West First avenue

Assistant in Industrial Department and Foreman of the Forge Room

Sixteen years' experience in work-shops. Present position since September, 1896.

ALBERT EARL VINSON.....134 West Ninth avenue

Assistant in Agricultural Chemistry

Instructor in Chemistry, Y. M. C. A., Dayton Ohio, 1895. Present position since September, 1896.

CHARLES WILLIAM FOULK.....41 Eleventh avenue

Assistant in General Chemistry

B. A., Ohio State University, 1894. Present position since September, 1896.

CHARLES WILLIAM BURKETT.....1556 Neil avenue

Assistant in Agriculture

B. Sc., (Ag.) Ohio State University, 1895. Foreman of State Farm, Ohio State University, 1895--'96. Present position since 1896.

FREDERICK EDWARD KESTER.....1473 Neil avenue

Assistant in Physics

M. E. (in E. E.), Ohio State University, 1895. Fellow in Physics, Ohio State University, 1895--'97. Present position since 1897.

EDWARD M. VAN HARLINGEN.....1594 Neil avenue

Assistant in Anatomy and Physiology

B. Sc., Ohio State University, 1883; M. Sc., Ohio State University, 1897. Graduate Student Ohio State University, 1896--'97.

JOHN H. SCHAFFNER.....79 East Third avenue

Assistant in Botany

A. B., Baker University, Kansas, 1893. A. M., University of Michigan, 1894; M. S., Baker University, 1896. Student in Botany, Zoology and Geology, University of Michigan, 1893--'95. Student in Botany and Paleo-Botany, University of Chicago, 1896--'97. Assistant in Botany, University of Michigan, 1894--'95. Professor of Natural Sciences, University of South Dakota, 1895--'96.

CLARK WISSLER.....1355 North High street

Assistant in Philosophy and Pedagogy

B. A., Indiana University, 1897. Assistant in Philosophy, Indiana University, 1895--'97.

*** THEODORE GRIFFIN**.....

First Assistant Director, Clay-Working and Ceramics

CHENA B. HINE.....University Farm House

Assistant in Horticulture and Forestry

* Resigned December, 1897.

† From January, 1898.

WARREN KING MOORHEAD.....1080 Madison avenue

Curator of the Archæological Collection

Assistant, Smithsonian Institution, 1888–'89; Assistant in Anthropology, World's Fair, 1891–'93

JAMES GRANT BOYD.....38 West Woodruff avenue

Fellow, and Assistant in Veterinary Medicine.

D. V. M., Ohio State University, 1897

CHARLES BYRON FREDERICKS.....Veterinary Hospital

Fellow, and Assistant in Veterinary Medicine

V. M. and S., Ontario Veterinary College, 1893. In practice since graduation.

HARRY WALDO KUHN.....221 West Eleventh avenue

Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1897.

JOHN RUDOLPH SPURRIER.....224 West Franklin avenue

Fellow, and Laboratory Assistant in Electrical Engineering

E. E., Ohio State University, 1896. Fellow and Laboratory Assistant in Mechanical Engineering, Ohio State University, 1896–'97.

ROBERT FISHER.....810 Franklin avenue

Fellow, and Laboratory Assistant in Chemistry

G. Ph., 1895, M. Ph., 1896, Ohio State University. Special Student in Chemistry, same institution, 1896–'97.

*EDWARD THOMPSON WATSON.....165 West Ninth avenue

Fellow, and Laboratory Assistant in Chemistry

B. Sc., 1897, Ohio State University.

JOHN FERGUSON CUNNINGHAM.....1462 Worthington street

Fellow, and Laboratory Assistant in Horticulture and Forestry.

B. Sc., (in Horticulture), 1897, Ohio State University.

JOHN HERBERT FOX.....199 West Eleventh avenue

Fellow and Laboratory Assistant in Industrial Arts

M. E., 1897, Ohio State University.

HORACE JUDD.....22 West Woodruff avenue

Fellow, and Laboratory Assistant in Mechanical Engineering

M. E., 1897, Ohio State University.

†FRANK ORRVILLE CLEMENTS.....

Fellow, and Laboratory Assistant in Chemistry

MELVIN DRESBACH.....236 West Eighth avenue

Fellow, in Anatomy and Physiology

B. Sc., 1897, Ohio State University.

CLYDE T. MORRIS.....818 Kerr street

Emerson McMillin Fellow, and Assistant in Astronomy.

HARRIET TOWNSHEND.....53 West Eleventh avenue

Library Assistant

Present position since September, 1895.

*Resigned, November, 1897.

†From December, 1897.

MAUD DOROTHY JEFFREY.....65 West Eleventh avenue

Library Assistant

B. Ph., Ohio State University, 1895. •Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

GERTRUDE STOWELL KELLICOTT.....1332 Highland street

Library Assistant

Student (irregular) Ohio State University, 1888-'95. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

Changes, 1898-99

WITHDRAWN

Professor Arthur Lyman Williston, Lecturer Paul Jones, Lecturer George K. Nash, Assistant Berthold August Eisenlohr, First Assistant Director of Ceramics William Lloyd Evans, Assistant Charles William Burkett, Assistant Frank Haas, Curator of Archaeological Collections Warren K. Moorehead.

APPOINTMENTS

HERBERT OSBORN.....357 West Seventh avenue

Professor of Zoology and Entomology

B. Sc., Iowa Agricultural College, 1879; M. Sc., same institution 1880. Student at Museum Comparative Zoology (Cambridge, Mass.) 1881-'82, Entomology; College of Physicians and Surgeons, Des Moines, 1884-'85 (Anatomy and Physiology); Zoological Station Naples (Smithsonian table), 1894-'95. Assistant in Zoology and Entomology, Iowa Agricultural College, 1880-'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884-'86. Professor and Entomologist, Iowa Agricultural College, 1887-'98; Special Agent Division Entomologist U. S. Department of Agriculture, 1885-'94. State Entomologist, Iowa, 1898.

FRANK EDWIN SANBORN.....167 West Eleventh avenue

Director of the Department of Industrial Arts

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889. Assistant in Drawing, Massachusetts Institute of Technology, 1889-'90; Teacher in Manual High School Department, Pratt Institute, 1890-'91; Walker Special Instructor Tufts College, 1891-'94; Instructor in Mechanical Department, Tufts College, 1894-'98. Present position since September, 1898.

•RAYMOND MOLLYNEAUX HUGHES.....

Assistant Director of the Department of Clay Working and Ceramics

B. A., Miami, 1893. Student of Chemistry, Chicago University, 1894; Student of Chemistry, Miami, 1894-'95; Teacher of Chemistry and Physics, High School, Hamilton, Ohio, 1893-'95; Student in Chemistry at Massachusetts Institute of Technology, 1897-98.

MURRAY P. BRUSH.....532 East Broad street

Assistant in Romance Languages

A. B., Princeton, 1894; Ph. D., Johns Hopkins, 1898. Student, French Language and Literature in Paris, winter of 1895-96, attending lectures at the Sorbonne, College de France, and Ecole des Hautes-Etudes; Romance Department of Johns Hopkins, 1894-'95 and 1896-'97. Summer of 1897 in Libraries of Italy.

FRANK RUHLEN.....1568 Neil avenue

Assistant in Agriculture

B. Sc., (Agr.) Ohio State University, 1896.

•Resigned, September, 1898.

SARAH STUBBS JAMES.....

Assistant in Domestic Economy and Instructor in Domestic Art

Student in University of Cincinnati, 1892-'93. Student in Miami University, Oxford, O., 1887-'88. Student in Institute of Technology, Boston, Mass., 1896-'97. Student in Columbia University, 1897-'98. Teacher in the Public Schools of Cincinnati, 1875-'79, and in Woodward High School, Cincinnati, O., 1879-'84.

ALBERT V. BLEININGER.....North Dormitory

Assistant Director of the Department of Clay Working and Ceramics

Present position since 1898.

NEWTON HENRY BROWN.....1609 North High street

Assistant in Physics

M. E. in E. E., Ohio State University, 1893; M. A., Cornell University, 1898; Student Assistant in Physics, 1892-'93; Assistant in Physics, Ohio State University, 1893-'96. Present position since September, 1898.

EDWARD EVERETT SOMERMEIR.....113 West Frambes avenue

Assistant in Metallurgy and Mineralogy

G. Ph., Ohio State University, 1898. Student laboratory assistant in chemistry, 1897-'98. Present position since September, 1898.

BURT BIDWELL HERRICK.....

Instructor in Cheese Making

ELISHA SMITH.....

Assistant in Cheese Making

WILLIAM C. MILLS.....91 West Frambes avenue

Curator of Archæology

B. Sc. (H. and F.), Ohio State University, 1898.

FREDERICK T. HALE.....239 West Tenth avenue

Fellow, and Laboratory Assistant in Mechanical Engineering

M. E. Ohio State University, 1898.

JOHN BERNARD PARKER.....43 West Woodruff avenue

Fellow, and Assistant in Rhetoric and English Language

B. A., Ohio State University, 1898. Present position since September, 1898.

FRED ALAN FISH.....239 West Eleventh avenue

Fellow, and Laboratory Assistant in Electrical Engineering

M. E. (in E. E.) Ohio State University, 1898.

EMMA LEANNA BALL.....225 King avenue

Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1895; M. Sc., same institution, 1896.

ALFRED HEBER McINTIRE.....240 West Eighth avenue

Fellow in Industrial Arts

M. E. in E. E., Ohio State University, 1898.

SAMUEL EUGENE RASOR.....22 West Woodruff avenue

Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1898. Present position since September, 1898.

OLIVER V. BRUMLEY.....

Fellow and Assistant in Veterinary Medicine

Veterinary Surgeon's certificate, Ohio State University, 1897. Practiced 1897-'98.

BENJAMIN MAAG.....164 West Ninth avenue

Emerson McMillen Fellow and Assistant in Astronomy

Ph. B., Wooster University, 1893.

LUCY ALLEN.....31 East Seventh avenue

Library Assistant

B. A., Ohio State University, 1897. Student in Library Science under Dr. G. E. Wire, summer of 1898 at Ohio State University. Present position since September, 1898.

Changes in Titles

GEORGE WELLS KNIGHT,	1897-'98—Professor of History and Political Science and of Constitutional Law 1898-'99—Professor of American History and Political Science, and of Constitutional Law; and in charge of European History
DAVID S. WHITE,	1897-'98—Associate Professor of Veterinary Medicine 1898-'99—Professor of Veterinary Medicine
PERLA G. BOWMAN,	1897-'98—Associate Professor of Domestic Science 1898-'99—Associate Professor of Domestic Science in charge of the Department of Domestic Economy
FREDERICK CONVERSE CLARK,	1897-'98—Assistant Professor of Economics and Sociology 1898-'99—Associate Professor of Economics and Sociology (Independent)
WILBUR HENRY SIEBERT,	1897-'98—Assistant Professor of History 1898-'99—Associate Professor of European History
WILLIAM DAVID GIBBS,	1897-'98—Assistant Professor of Agriculture 1898-'99—Associate Professor of Agriculture
STELLA M. ELLIOTT,	1897-'98—Assistant Director of the Gymnasium 1898-'99—Associate Director of the Gymnasium
EDWARD N. VAN HARLINGEN,	1897-'98—Assistant in Anatomy and Physiology 1898-'99—Assistant Professor of Anatomy and Physiology
CHARLES WILLIAM FOULK	1897-'98—Assistant in Chemistry 1898-'99—Assistant Professor of Analytical Chemistry
THOMAS EWING FRENCH,	1897-'98—Assistant in Drawing 1898-'99—Assistant Professor of Drawing
JOHN ADAM BOWNOCKER,	1897-'98—Assistant in Geology 1898-'99—Assistant Professor of Geology
CLAIR A. DYE,	1897-'98—Assistant in Pharmacy 1898-'99—Assistant Professor of Pharmacy
WILLIAM ABNER KNIGHT,	1897-'98—Assistant in the Industrial Department and Foreman of the Machine Shops 1898-'99—Assistant in Industrial Arts and Instructor in Machine Work
CHARLES WILLIAM WEICK,	1897-'98—Assistant in Industrial Department and Foreman of the Carpenter and Pattern Shops 1898-'99—Assistant in Industrial Arts and Instructor in Pattern Making and Founding

CHARLES CONRAD SLEFFEL,	1897-'98—Assistant in Industrial Department and Foreman of Forge Room 1898-'99—Assistant in Industrial Arts and Forge Master
JOHN FERGUSON CUNNINGHAM,	1897-'98—Fellow in Horticulture and Forestry 1898-'99—Assistant in Horticulture and Forestry
CHARLES B. FREDERICKS,	1897-'98—Fellow aud Assistant in Veterinary Medicine 1898-'99—Assistant in Veterinary Medicine
*HARRY WALDO KUHN	1897-'98—Fellow and Assistant in Mathematics 1898-'99—Assistant in Mathematics

*Absent on leave

Executive Department

1898–'99

JAMES H. CANFIELD President
ALEXIS COPE Secretary Board of Trustees and Bursar
W. C. McCRACKEN Chief Engineer
JEAN BLACKFORD Executive Clerk
EDITH D. COCKINS Registrar
C. E. BARNET Accountant
CHARLES LOWE Assistant Engineer
THOMAS BOUDE First Fireman
W. E CASE Second Fireman
JAMES KELLEY Lawnkeeper
HENRY MARTZ Watchman

JANITORS

ARTHUR CHANTLER University Hall
HENRY CHANTLER Orton Hall
J. F. LONGMAN Chemical Hall
JOHN H. BROWN Hayes Hall
JOHN CONRAD Horticultural Hall and Veterinary Hospital
D. D. GEREN Gymnasium
WILLIAM WHITESTINE Biological Hall
M. N. COOK Townshend Hall

University Addresses

June 12th.....Baccalaureate Sermon, "The Christian of Culture in American Life"
RIGHT REV. WILLIAM LAWRENCE, D. D.,
Bishop of the Protestant Episcopal Church, Diocese of Massachusetts

June 15th.....Commencement Address
REV. CASPAR WISTER HIATT, D. D.,
Euclid Avenue Congregational Church, Cleveland

FACULTY LECTURE COURSE

January 17th....."What a Small Connecticut Farm can Produce"
MR. AMASA PRATT, Columbus

January 24th....."Employer and Employee"
MR. H. M. HYDE, Dayton
National Cash Register Co

January 31st....."Murillo"
CAPTAIN ALFRED LEE, Columbus
Under the auspices of the University Sketch Club

February 7th....."Pure Water Supply of Cities"
MR. JOHN W. HILL, Cincinnati

February 14th....."Thomas Jefferson"
PROFESSOR J. P. GORDY, Columbus

February 28th....."Athletics—Ancient and Modern"
PROFESSOR J. R. SMITH, Columbus

March 7th....."The Water of the Scioto River"
PROFESSOR N. W. LORD, Columbus

March 14th....."A Day in the Police Court"
JUDGE SAMUEL J. SWARTZ, Columbus

March 21st....."The Ethical Self"
DR. W. H. SCOTT, Columbus

DEPARTMENT LECTURES

Agriculture

October 13 and 14, 1897....."Training and Gaiting Saddle Horses"
MR. J. A. WALLACE, Columbus

February 21, 1898....."Dairy Farming in Europe"
PROFESSOR JOHN W. DECKER, University of Wisconsin

February 28th, March 1st, 2d, 3d.....Four lectures, "Breeding and Judging Sheep"
MR. H. P. MILLER, Sunbury

March 10th....."Barn Building"
MR. JOHN L. SAWYER, Bellefontaine

March 24th....."Writing for the Press"
DR. W. I. CHAMBERLAIN, Hudson

HISTORY AND POLITICAL SCIENCE

Economics

November 18, 1897....."Through Freight"
MR. C. C. CORNER, Columbus
Chief Clerk, Star Union Line

November 22, 1897 "The Division"
MR. T. F. WHITTLESEY, Toledo,
Gen. Supt., T. & O. C. R. R.

December 21, 1897 "Financial Management of Street Railways"
MR. P. V. BURRINGTON, Columbus,
Auditor, Columbus Street Railway Co.

January 18, 1898 "The Telegraph Service"
MR. A. M. DUNLAP, Columbus,
Manager of Western Union Telegraph Co.

January 20, 1898 "The College Man in Railroading"
MR. S. H. CHURCH, Pittsburgh.
Assistant Secretary, Pennsylvania System

March 4th "Our Foreign Trade"
MR. C. A. GREEN, Philadelphia,
Philadelphia Commercial Museum

History.

March 11th "Washington the Man"
PROFESSOR EDWIN E. SPARKS, University of Chicago

LECTURES BEFORE SOCIETIES

Engineers

March 13th "Some Points in Dynamo Machinery"
MR. CHARLES F. SCOTT, Pittsburgh,
Westinghouse Electrical and Manufacturing Co.

Mathematical Society

May 26th "The Making of Mathematical Text-books"
DR. E. E. WHITE, Columbus

Political Science Club

December 15, 1897 "Garibaldi and the Liberation of Italy"
COL. WILLIAM JACKSON ARMSTRONG

Ohio State Archæological and Historical Society

March 10th "Cliff-Dwellers of the Southwest"
COL. ROBERT M. STANTON, Coronado Beach, Cal.

THE UNIVERSITY

Ohio State University

THE UNIVERSITY AND THE STATE

Under an act of Congress passed July 2, 1862, the State of Ohio received from the United States a large grant of the public lands for the purpose of establishing a "college where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." In accordance with this act, the Ohio State University was founded by the State as a public institution of learning. The governing body of the institution is a Board of Trustees, appointed by the Governor of the State for terms of seven years as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by special appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the Legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture, engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

THE STATE SYSTEM OF EDUCATION

A State system of free, public education, worthy of the name, freely offers every opportunity and inducement to its entire school population to pass by systematic methods, easily apprehended by those who are to receive the benefits, in schools under popular control, from the lowest seat in the primary school to graduation by a university of high standing. It is not supposed that all pupils can or will accept these opportunities or respond to these inducements. But the highest welfare of the State demands that both opportunity and inducement shall be continually present, and that the broad and firm highway of sound training and of higher learning shall be opened freely to every child of the State.

The State system is naturally divided into three great sections. The first includes the rural or district schools, and the work done in the first eight grades of the city schools. To this is generally given the name of "the Grades." The second division includes the High Schools. The work of the third division is done by the University.

THE UNIVERSITY

This means that the University is practically the thirteenth, fourteenth, fifteenth and sixteenth grades of this State system of free public education. Its work is related to that of the High Schools precisely as their work is related to that of "the Grades." It ought to be quite as natural for a pupil to look forward from the High School to work in the University, or its equivalent, as to look forward from "the Grades" or the Rural Schools to work in the High Schools.*

ORGANIZATION OF THE UNIVERSITY

The Ohio State University is divided into six colleges, as follows:

The College of Agriculture and Domestic Science consists of those departments represented in the course leading to the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Horticulture and Forestry and Bachelor of Science in Domestic Economy; in the Short Course in Agriculture, in the Short Course in Domestic Economy, and in the Course in Dairying.

The College of Arts, Philosophy and Science consists of those departments represented in the courses leading to the degrees of Bachelor of Arts, Bachelor of Philosophy, and Bachelor of Science; and in the Courses Preparatory to Law and to Journalism, and to Medicine.

The College of Engineering consists of those departments represented in the courses leading to the degrees of Civil Engineer, Engineer of Mines, Engineer of Mines in Ceramics, Mechanical Engineer, Mechanical Engineer in Electrical Engineering, and Bachelor of Science in Industrial Arts, Bachelor of Science in Chemistry or in Metallurgy; in the Course in Architecture, in the Short Course in Clay-working and Ceramics, and in the Short Course in Mining.

The College of Law consists of those departments represented in the course leading to the degree of Bachelor of Laws.

The College of Pharmacy consists of those departments represented in the courses leading to the degree of Bachelor of Science in Pharmacy, and in the Short Course in Pharmacy.

The College of Veterinary Medicine consists of those departments represented in the course leading to the degree of Doctor of Veterinary Medicine, and to a certificate of Veterinary Surgeon.

Each College is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of students in that College.

LOCATION OF THE UNIVERSITY

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and thirty acres, bounded east and west by High street and the Olentangy river, respectively. The western portion, about 200 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science. The eastern portion is occupied by the principal University buildings, campus, atheletic and drill grounds, a park-like meadow, and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower beds; and are so managed as to illustrate the instruction in Botany, Horticulture Forestry, Landscape Gardening and Floriculture.

*Of course this does not mean that there will be but one institution of the College or University grade in the state; but that there will be at least one such institution in the state, which shall be recognized as belonging to the state system of public education and as the natural and logical head of that system.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds, or the Athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townshend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

BUILDINGS

UNIVERSITY HALL contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y. M. C. A. and King's Daughters' room, the Young Woman's League room, and class rooms and laboratories for the departments of Economics, English, French, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy and Physics. An electric passenger elevator connects all floors.

MECHANICAL HALL contains a room fitted up with cases for the care of models, instruments of precision, etc.; a room for instruction in laboratory mechanics and draughting, and laboratories with the engines, hydraulic plant, testing machines, etc.

BOTANICAL HALL has on the first floor the lecture room of the department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

ELECTRICAL HALL devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

CHEMICAL HALL is now occupied by the departments of Chemistry, Mining, Metallurgy, and Pharmacy. The department of Chemistry occupies the middle and western portion of the second floor. The main lecture room has a seating capacity for one hundred and fifty persons. The qualitative laboratory contains accommodations for two hundred and forty students. The quantitative laboratory contains desks for eighteen students. There is also a second lecture room, accommodating forty persons; a room for the preparation of experiments, a balcony accessible both from the lecture room and the preparation room, two store rooms for supplies, a balance room, a room for working with foul gases, one for distilling water, one for spectroscopic work, one for rough work, one for books, a private laboratory, and an office.

The departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity of forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accommodation of the large geological collection of the University and for work and instruction in the department of Geology. A portion of it is occupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and

faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professor's private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Ceramics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The department of Drawing occupies the third floor for instruction in mechanical and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

THE EMERSON MCMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced."

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays: a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmuller; a sidereal clock by Clemens Riefler of Munich; a comparater by Carl Ziliss; a four-inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instrument, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

TOWNSHEND HALL is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students.

At the extreme south end of this floor is a large laboratory for student-work in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all appliances for showing lantern slides of livestock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lavatory, butter-making room, cheese-making room, two cheese-curing rooms and an instructor's room.

In the south end of the basement is a livestock room about forty feet square. One third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging livestock. Connected with this is a room fitted with stalls for the temporary accommodation of livestock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also on this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townshend Society, designed to seat about two hundred persons.

BIOLOGICAL HALL is designed for the special accommodation of the departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories, and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

THE GYMNASIUM AND ARMORY was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitors' gallery seating about seven hundred persons. At the northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the level with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room which is to be the home of the University Athletic Association. On the young women's side are the locker rooms and bath rooms—precisely like those provided for the young men—a bicycle room, lecture room and private office for the instructor in sanitation and hygiene for young women.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are seven dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the seventh is the farm house.

LABORATORIES AND EQUIPMENT

AGRICULTURE

The equipment of this Department may be divided along three general lines: the plant, the museum and the illustrative materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn, and several smaller buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the Department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horses are kept and used in the farm work. The Department manages a milk dairy; having a herd of about forty cows, composed of pure bred and grade Jerseys and shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a root cellar, a work-shop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton, forage plants and foodstuff. Milling and other processes are illustrated by samples of the various products of manufacture.

The museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of live stock, farm machinery, fences, buildings, etc. The Department has and uses constantly in the class room a Beseler double oxygen-ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this Department, there is in the general library a fairly good collection of books

and periodicals devoted to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (*See also* BUILDINGS—*Townshend Hall*)

BOTANY

The general Botanical Laboratory occupies a part of the second floor of Botanical Hall. It is 23x33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also MUSEUMS—*The Botanical Museum;* and BUILDINGS—*Botanical Hall.*)

CHEMISTRY

The laboratories of the Department accommodate two hundred and twenty-five students. The general lecture room is large and well lighted, and all needed facilities are provided for the full experimental illustration of the lecture courses. The Department is generously supplied with the best apparatus and materials for both lecture and laboratory work, and has also a growing collection of specimens illustrating the application of chemistry to the arts. (See also BUILDINGS—*Chemical Hall.*)

CIVIL ENGINEERING

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30″ by 36″ top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lantern and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; set of tracings of standard structures from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented, or made by students of the Department.

CLAY-WORKING AND CERAMICS

The University is the first, and at this time the only institution in the United States offering special facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. The facilities of the Department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthern wares to porcelain. The machinery is of the latest types and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished articles by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer-pipe, stoneware, or pottery can be burnt. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle furnace for testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has recently been put into operation. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German but containing a few English and French works, and the trade periodicals. (See also BUILDINGS—*Orton Hall.*)

DOMESTIC ECONOMY

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be as thorough and as scientific as that of any other department in the University.

DRAWING

The Department occupies the entire third floor of Hayes Hall, and is provided with the following equipment for the illustration of the work in drawing and for practical training in the same; For freehand drawing: Flat and shaded copies in pen, pencil and charcoal; wooden models of geometric forms; plaster casts of ornaments, flowers, fruit and the antique; easles and drawing tables; a well selected line of work from artists of recognized ability. For mechanical drawing: O. S. U. improved drawing tables (30″ x 36″ tops), a set of the celebrated Schroeder models, a collection of shop drawings and facilities for blue printing. For photography: A well arranged and equipped dark room, printing outfits, copying camera, four view cameras, lenses of long and short focus, flash lamp and shutter for instantaneous photography. In addition to the above, the library contains a well chosen collection of books pertaining to the work of the Department. (See also BUILDINGS—*Hayes Hall.*)

ELECTRICAL ENGINEERING

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes from 40 H. P. down; aggregating over 200 horse power. These include direct and alternating current generators, polyphase motors, arc and incandescent lighting generators, railway and stationary motors and a unipolar dynamo. The latter, with an alternating current generator and a 2-phase motor, were built by the students; it being the policy of the Department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding,—built at the University. Arc lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory—with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the Department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

GEOLOGY

The University is able to present unusual advantages for the study of Geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the Department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories. (See also MUSEUMS—*the Geological Museum;* and BUILDINGS—*Orton Hall.*)

HORTICULTURE AND FORESTRY

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing numerous varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, currant and gooseberry; (5) a vegetable garden, with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse, with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens, and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also MUSEUMS—*The Botanical Museum*; and BUILDINGS—*Horticultural Hall.*)

MECHANICAL ENGINEERING

The greater portion of Mechanical Hall is devoted to laboratory purposes.

The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The north laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single or duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condenser. Pressure and vacuum gauges are calibrated. Indicator springs of five makers are tested either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 800 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade, and Pelton, water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pitot tube are also used. Ericsson and Rider hot air engines are tested. A Rife hydraulic engine, a Humphryes ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

METALLURGY

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A furnace room in the basement is fitted for gold and silver assaying, with improved muffle and crucible furnaces.

The lecture room in metallurgy has arrangements for projecting photographs of machines, mines, and furnaces, for class illustration, and there is a large collection of such views. There is a photographic room with blue-printing facilities, where students learn to make copies of the drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determinative mineralogy. (See also BUILDINGS—*Chemical Hall;* and MUSEUMS—*The Geological Museum.*)

MINE ENGINEERING

The Department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation. There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught map making and the platting of actual surface and underground surveys; the making of tracings of drawings and how to make blue-prints. He is also taught proper methods of keeping notes and all records necessary to an efficient engineer's office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

The lecture room has arrangements for projecting photographs of machines, mines and mine equipment, for class illustration, and there is a collection of such views. Also photographic room with blue-printing facilities, where students learn to make copies of the drawings made by themselves and those used in illustrating the lectures.

PHARMACY

The facilities provided for illustration of this work and for practical training are as follows: The apartments assigned to this work occupy the west end of the Chemical Hall, first floor and basement. The lecture room will accommodate sixty students, and is provided with a large lecture table and supplied with gas and water, and other conveniences for experiment. About the walls are arranged cases in which are exhibited rare and costly chemicals, curious drugs, and high-grade pharmaceuticals. Adjoining this room is the preparation room and storeroom, where the supplies and apparatus and material are kept, and where the apparatus for experiment and illustration before classes is prepared. Also adjoining this room is the professor's private laboratory. The main laboratory has desks for thirty-five students, each one provided with gas and water, and sufficient storage space for material and apparatus. The laboratory is furnished with apparatus for distilling, and reclaiming, with mills, balances, drying closets, steam vaporizers, hoods and other special apparatus for pharmaceutical work. Opening into the laboratory is the drug store. This drug store is complete, and is in itself a cabinet of official drugs, and all preparations thereof. It is provided with a prescription desk and all apparatus adapted for training in prescription work. Adjoining the laboratory is the reading room, where are kept the various pharmaceutical journals, the dispensatories, and many books of reference. Also adjoining the main laboratory is the balance room, which is well provided with analytical balances, specific gravity balances and microscope, all of which are intended for higher pharmaceutical work.

In the reading room is also a cabinet of crude drugs, which have been classified and numbered but bear no name. This cabinet is adapted to the study of pharmacognosy.

In addition to the foregoing equipment, the Department is possessed of an extensive range of apparatus, by means of which any branch of work in pharmacy can be successfully pursued. The Department is complete in all its details, and affords unexcelled opportunity for the study of pharmacy. (See also BUILDINGS—*Chemical Hall.*)

PHYSICS

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a break-circuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat; Melloni-Tyndall apparatus for radiant heat; standard thermometers by Baudin and others; Rutherford and Rowland, diffraction gratings; Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Salleron's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is *ex officio* State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the Department.

PHYSIOLOGY

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the Department for work in bacteriology and physiology is of the best and most approved construction, and is adapted to the accurate investigation of bacterial forms, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also BUILDINGS—*Biological Hall.*)

SHOPWORK

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-makers' turning lathes with cupboards containing

the necessary turning and pattern-making tools under each, a pony planer, a buzz-planer, a circular rip and cross-cut saw, a scroll saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and a punch, shear and bar cutter. The blast for the forges is furnished through underground piping by a 45″ Buffalo pressure blower, and the smoke is removed by a 55″ Buffalo exhaust fan overhead. Both of these fans are driven by a 15 horse-power electric motor.

The foundry is equipped with a 24″ Calliau cupola, the blast for which is furnished by a 30″ Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30 horse power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work with complete sets of tools, eight speed lathes, sixteen engine lathes, two planers, two shapers, a milling machine, an upright drill, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, etc., micrometers and a great variety of special tools. (See also BUILDINGS—*Hayes Hall.*)

VETERINARY MEDICINE

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stalls for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs represented, but also the meat-producing animals from the farm, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also BUILDINGS—*The Veterinary Hospital, Biological Hall.*)

ZOOLOGY AND ENTOMOLOGY

The outfit of the Department is ample, consisting of general zoological collections, an entomological collection, a series of skeletons, alcoholic specimens, and all needed instruments. (See also MUSEUMS—*The Zoological Museum, The Lake Laboratory, Biological Hall.*)

THE LAKE LABORATORY

There has been established at Sandusky a summer laboratory for the purpose of investigations of biological problems in the great lakes. It is located at the present site of the State Fish Hatchery in the east bay of Sandusky. The site

is chosen with especial reference to its convenience, the sheltered waters of the bay, the proximity of the fish packing establishments, and the ready access to the islands and open lake. The laboratory affords a rare opportunity for instructors and students to spend the summer vacation at practical biology in a most agreeable and profitable way. The facilities offered are free to students of any branch of biology. The chief work for the first season related to the food and enemies of the fishes of the lake.

THE MUSEUMS

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

(*a.*) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.

(*b.*) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.

(*c.*) The economic minerals of the State are also shown to excellent advantage in the museum. The coals, petroleums, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.

(*d.*) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geological casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual specimens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y., and proves to be one of the largest in the country.

The museum also has a mounted skeleton of *Megalonyx Jeffersonii*, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes

county, O., in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work has been begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved, but the preparatory stages, their work and architecture; in fact, all that can illustrate the life-history and habits.

Among its features and recent additions may be mentioned the Wheaton collection of the birds of Ohio, numbering about 1,000 skins. These have been arranged in Harvard boxes, and may be consulted at any time by those interested.

Also a recently purchased collection of birds about 1,400 in number representing quite fully the fauna of North America.

About 3,500 species of molluscan shells have recently become the property of the museum. These will soon be displayed in suitable cases.

Among the mammals added are two fine specimens of moose, an animal fast disappearing from North America, and a very fine specimen of Hippopotamus donated by Sells' Bros. Our reptiles, fishes and insects are being accumulated as rapidly as possible. There is, besides, a good supply of skeletons, crania and alcoholic material for the laboratory courses in comparative anatomy and general zoology.

Much attention has been given of late to the collection of insects; in some groups it is now abreast of any; especial efforts are being made to increase the exhibit of economic or destructive insects. The fine collection of *Odenata* made by Prof. Kellicott has lately been purchased.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the University herbariums, both general and state, also Professor Kellerman's private herbarium of over 20,000 specimens deposited for use in the Botanical Department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fibers, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILDINGS—*Townshend Hall.*

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Equipment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHÆOLOGIC COLLECTION. Orton Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in the various parts of the State during the summers of 1894, '95 and '96, and as a result the contents of more than eighty mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

LIBRARIES

THE UNIVERSITY LIBRARY

The University Library is located in the east end of Orton Hall. The system of departmental libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 A. M. until 9:30 P. M.; on Saturday from 8 A. M. until 4 P. M.

The management of the Library is vested in a Library Council which is composed of the President, the Librarian and the Deans of the six colleges.

STATE LIBRARIES

Students are privileged in being near the two State libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

CITY LIBRARIES

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and reference rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

SPECIAL LIBRARY IN ECONOMICS

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade journals are received and filed regularly. The business men of Columbus have contributed over $1,200 for the maintenance of this commercial library.

AIDS TO MORAL AND RELIGIOUS CULTURE

Chapel services are held daily (except Saturday and Sunday) at the University, at which the attendance of all instructors and students is expected. The services consist of singing, reading the scriptures, and prayer.

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. It has a large membership and steadily grows in influence. Services are held weekly. New

students are made cordially welcome, and young church members will here enjoy Christian influences and fellowship in college life. A University Circle of the International Order of the King's Daughters and Sons holds its meeting once a week, and includes in its membership a majority of the women attending the University. A club for the study and practice of philanthropy has recently been organized by the King's Daughters.

An effort is being made to complete, by subscription, the fund which was begun two years ago by students, alumni and professors, for the erection of a building to accommodate the student organizations of the University.

LITERARY AND OTHER SOCIETIES

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the Athenæan Literary Society, open to young men, was founded in the winter of 1896–'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed. The Chemical Association is a similar organization in the line of chemistry.

The Political Science Association is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported, and current questions and publications in political science, considered and discussed.

The Engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Townshend Society of the College of Agriculture meets weekly for the discussion of current topics in agriculture and related subjects.

The Germania Society was founded in 1895. Only students that have had elementary ("first year") German are eligible to membership.

The aim of this society is to give to its members additional opportunities for the study of German Literature and for the practical use of the German language. Nothing but German is spoken at the meetings, which are held every other week throughout the University year. Students of German find it very advantageous to be present at those meetings and to take an active part in them.

The Ethical Society, open to all students and to members of the Faculty, was organized in the winter of 1896–'97, and meets on the afternoon of each alternate Sunday.

The Philosophical Society, organized under the auspices of the departments of Philosophy and Pedagogy, in the winter of 1896–'97, is open to the students of the two departments named, and to those interested in Philosophy.

The Organic Evolution Club was organized in the winter of 1896–'97 by those students and members of the Faculty especially interested in the study of Evolution.

The O. S. U. Dramatic Club was organized in 1893. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, composed of sixteen members; the O. S. U. Octette, a mandolin orchestra of eight pieces; the O. S. U. Mandolin and Guitar Club, and the Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the possession of the University forms a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The Club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club was organized for the purpose of promoting art interest among the students of the University. Its membership is confined to University circles. The active members meet once a week for practical work; the associate members meet once a month in open session for literary programs bearing upon art, history and criticism.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

MILITARY SCIENCE AND TACTICS

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the Law College, and such others as may be specially excused, shall render two years of cadet service as a condition of graduation. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the Department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their University work and the work of the Department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this Department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to a battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley & Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officer's sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the Department consists of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers' swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand roun ls of blank cartridges for cadet rifles.

PHYSICAL TRAINING

Competent instruction in hygiene and general sanitation is given by the Director of the Gymnasium, who has entire charge of the physical training and well-being of all students. Supplementing this work, the practical instruction in military tactics is found to be a most valuable aid. In addition to this, the University grounds afford excellent opportunities for general athletics, and the students support well organized clubs in base ball, foot ball and lawn tennis. These and other sports are participated in by large numbers, and friendly contests are occasionally held with other colleges. Besides the special clubs named above, the students have an athletic association which holds an annual "Field Day," in which prizes are given to the victors in the various contests usual on such occasions.

OHIO FORESTRY BUREAU

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

TERMS AND VACATIONS

The first term of each University year begins on Wednesday following the tenth day of September, and closes on the Wednesday preceding Christmas. The second term begins on the Wednesday following the first day of January, and closes on the Friday following the twenty-first day of March. The third term begins on the Monday following the close of the second term, and closes on Commencement day, which is the Wednesday following the eleventh day of June.

In the college of Arts, Philosophy and Science and in the college of Law the first semester begins on the Wednesday following the tenth day of September and closes on the Friday preceding the second semester. The second semester begins on the Monday of the eighteenth week preceding Commencement Week and closes on Commencement Day.

Regular college exercises are omitted on Thanksgiving Day and the day following, on the twenty-second day of February, and on Memorial Day.

FEES

THE COLLEGES

INCIDENTAL FEE.—A charge of fifteen dollars a year is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

LABORATORY FEES.—Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6	$10 00
" 15	5 00
Anatomy and Physiology, 53, 54, 55, 56, 59, 60	7 50
" " Vet. Medicine, 4	5 00
Botany, 4, 6, 7, 8	2 00
" 53, 55, 57, 58, 59, 60, 64	3 00
" 56 (half semester)	1 50
Ceramics, 1, 2, 3, 7, 8	1 50
" 9, 10, 11, 12	5 00
Domestic Science	5 00
Drawing, 7	2 00
Elec. Engineering, 4, 5, 4 or 5 hrs., $7.00; 3 hrs. or less	5 00

Gymnasium	1 00
Metallurgy, 3, 5, 6	1 50
Mechanical Engineering, 12, 13, 14, 15, 16, 17	5 00
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18	1 50
" 51, 52	2 25
Physics, 5, 6, 7, 9, 3 hrs., $5.00; over 3 hrs	7 00
" 55, 56, 57, 58, 60, 3 hrs., $7.50; over 3 hrs	10 50
Shop Work, 4 hrs. or less	5 00
" 5 hrs. or more	7 00
Zoology and Entomology, 53, 54, 55, 56, 61, 62	7 50
" " 57, 58, 59, 60	4 50
" " (Agriculture), 4, 7	1 00

The fees of the College of Law are $30 per semester, including the usual incidental fee.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water ($2.25 each semester). He is also required to buy his own supplies, as he needs them, at the general storeroom in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

All term dues must be paid at the opening of each term as a condition of admission to classes.

GRADUATION FEE.—A fee of five dollars, to cover expenses of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FREE SCHOLARSHIP IN AGRICULTURE AND DOMESTIC SCIENCE, AND IN VETERINARY MEDICINE.—A free scholarship, good for the Short Course, in Agriculture or for the First year of the four-year Course in Agriculture, is granted to one student annually from each county in Ohio. Each scholarship is valid two years from its grant, and covers the incidental fee and all laboratory fees, but the person appointed to receive its benefits is subject to all the other conditions prescribed for admission to the Course. If in any county there is no applicant for the free scholarship in Agriculture, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted, subject to the same conditions as are prescribed for the free scholarship in Agriculture. The appointments are made by the county boards of agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiries should be addressed to the Secretary or President of the County Agricultural Society. For further information concerning these scholarships, inquiries should be addressed to the Executive office of the University, or to the Professor of Agriculture.

THE COLLEGE OF LAW

INCIDENTAL FEE.—An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline, character of studies selected, etc., as other students in the University.

TUITION FEE.—In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students.

GRADUATE FEE.—A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE.—A fee of five dollars (to cover the expenses of graduation, diplomas, etc.,) is charged to all who take the degree of Bachelor of Laws, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

OTHER EXPENSES

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and fifty cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat) about fourteen dollars. It is quiet in pattern, and is designed to be worn daily in place of civilian dress.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses :

	Low.	Average.	High.
Incidental fees	$15 00	$15 00	$15 00
Laboratory fees	15 00	20 00	54 00
Books and stationery	15 00	25 00	40 00
Room	4 50	37 00	75 00
Furniture	10 00		
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	$143 50	$221 00	$348 00

The second and third estimates for room include light, fuel and care. The third estimate is for a room occupied by a single student. The requirements for laboratory fees and books depend upon the course of study pursued.

SELF-SUPPORT

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. *But the University cannot promise work to all applicants.* Many students find work in private families, in offices, and in various occupations, by means of which they defray at least a portion of their expenses. A portion of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of a lack of money for necessary expenses, *after having been say sixty days on the ground*—or long enough to inform himself as to the opportunities for securing employment. An employment bureau is maintained at the University, where the names of those seeking work and of those desiring workers are recorded.

For further information, address "Executive Office, State University, Columbus, Ohio."

THE COLLEGES

The Colleges

ADMISSION

The University is open on equal terms to both sexes.

The entrance examinations for 1899 will be held on Monday and Tuesday, June 12 and 13, and on Monday and Tuesday, September 11 and 12. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy and Science, or of Pharmacy, must be at least sixteen years of age; for admission to the College of Engineering or of Veterinary Medicine must be at least seventeen years of age; for admission to the College of Law must be at least eighteen years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

There are three modes of admission to the University:

1. Certificates of the preparatory departments of Colleges of approved standing and of Normal schools in Ohio are accepted, if found satisfactory, in lieu of examination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the applicant's rank or standing in it. A copy of the course of study should accompany the certificate; and both should be sent to the University not later than the first of September. *The University cannot promise this recognition to those certificates presented during entrance week*

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are required to bring certificates of honorable dismission.

Teachers' certificates (in force) will be accepted at their face value.

2. From time to time the University approves the courses of study in certain High Schools of the State: and the graduates of these High Schools are admitted on presentation of cards issued to them at their graduation by the University through the Principals of the High Schools.

3. All other applicants are subject to examination on the groups of study mentioned below under the headings of those Colleges and Courses in the University which they desire to enter.

Full equivalents for the text-books named will be accepted.

ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in any of the Colleges of the University, and do not desire to become candidates for degrees, will be admitted on the following conditions:

1. The regular entrance requirements must be satisfied.

But applicants who are not less than twenty-one years of age (eighteen years, in the College of Engineering), after obtaining credit for elementary or "grade"

work, and for such other subjects as may be necessary to qualify them for the classes that they wish to enter, may, on the presentation of satisfactory reasons, be admitted by the proper Faculty to any class in the University; provided, that if any student who has been admitted on these conditions afterwards becomes a candidate for a degree, he shall take the omitted entrance examinations at least twelve months before the degree is conferred.

2. On entering the University, students desiring to pursue special work are required to lay before the proper Faculty, for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of attendance. Such students will be held as strictly to their accepted schemes of work as are the regular undergraduates to their courses of study.

3. *Permission to enter as special undergraduates will be refused to all who fail to give satisfactory evidence of definiteness of purpose, and will be withdrawn whenever the conditions on which it was granted cease to exist.*

ADMISSION TO ADVANCED STANDING

1. Applicants who do not come from some other University or College must first obtain admission to some College of the University in the manner already described. They will then be examined on the undergraduate studies for which they ask credits.

2. Applicants who come from the collegiate department of an approved College, and who bring explicit and official certificates describing their course of study and scholarship, and also certificates of honorable dismission, will be admitted without examination except such as may be necessary to determine what credit they are to receive here for work done in the College from which they come.

ADMISSION TO GRADUATE WORK

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

1. MASTERS DEGREES.—Masters degrees are conferred upon graduates in Arts, Philosophy, Science, Agriculture, Horticulture and Forestry, and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study. Masters degrees are conferred without residence *upon graduates of this institution*, upon the same conditions of study and thesis as above; but these degrees will not be so conferred within less than three years after graduation. *The incidental fee of five dollars a term is due from candidates studying in absentia as from all other students, and should be forwarded to the Bursar of the University at the beginning of each term.*

2. DOCTORS DEGREES.—The degree of Doctor of Philosophy is conferred upon Bachelors of Arts, Bachelors of Philosophy, and Bachelors of Science at the end of not less than three years' residence and study, during the latter two years of which the candidate is required to pursue and complete an approved Course of study in at least two distinct departments of the University. He is, in addition, required to present an acceptable thesis, embodying original research.

The degree of Doctor of Science is conferred upon Bachelors of Science and graduates in the full technical Courses, at the end of a course of special, advanced study in science, upon the same conditions as to residence, time, and other requirements as are established for the degree of Doctor of Philosophy.

FELLOWSHIPS

To encourage graduates of this University, and of other similar and approved institutions in this state, to continue their work and to complete the courses necessary to second (and other) degrees, the University authorities have established fellowships in several departments. These demand about one-half of the time of the fellow for laboratory instruction or other similar assistance—as far as possible, along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from $250 to $300 for the University year.

Following are the fellowships for the academic year 1899-1900 as far as at present determined:

Anatomy and Physiology, Botany, Chemistry (two), American History and Political Science, Industrial Arts, Mathematics (two), Mechanical Engineering, Veterinary Medicine.

In addition to these, Mr. Emerson McMillin has established two fellowships: one in Astronomy, $300 for the academic year; and one in Economics, $250 for the academic year. No service is required in these fellowships, and fellows are expected to give their entire time to their graduate work.

Correspondence should be directed to the Executive Office of the University.

PRIZES

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law: which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

FOR ADMISSION[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English*, (*a*)—Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from the list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines, themes reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition—Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work: such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from English and American classics, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during his preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics—Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; *Pope's Iliad*, Books I, VI, XXII and XXIV; The Sir Rodger de Coverly Papers in *The Spectator*; Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, IV, XXII, and XXIV; The Sir Rodger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's Speech on *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's Minor Poems (*Comus, Lycidas, L'Allegro, Il Penseroso*); Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary: there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra*—Venable's Easy Algebra, complete.

4. *Botany*—Kellerman's Elementary Botany and Spring Flora, or equivalent.

7. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico*.

Or *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German*—Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pp.)

Joynes's or Whitney's Reader, Hillern, Höher als die Kirche, Riehl, Der Fluch der Schönheit, Freytag, Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the present, the *German* or *French* required for admission may be begun at the University, but without University credits.

5. *Plane Geometry*—White, Venable, Wentworth, or Wells.

6. *Physics*—Gage, Carhart and Chute, Avery, or Appleton.

7. Either of the following:
 Civil Government—Fisk or Thorpe preferred.
 History—Myers's *General History*.

COURSE IN AGRICULTURE

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Agr'l Chemistry (1) Principles.	5	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany and Vegetable Pathology.	5.
Drawing (10)	2.				
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme writing.	2.	Rhetoric (1) Prose Analysis.	2.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).*		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
Horticulture (1) Elements.	4.	Shopwork (1, 2) Carpentry, Forging.	3.	Horticulture (1) Elements.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Drawing (2) Lettering.	3.
*French (1) Elementary, or *German (1) Elementary.	4.	French (1) Elementary. or German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.
Geology (2) General.	5.	Geology (2) General.	5.		
Veterin'y Medicine (28) Anatomy.	5.	Veterin'y Medicine (29) General Pathology.	5.	Veterin'y Medicine (30) Special Pathology.	5.

*A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

FOURTH YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agriculture (14) Animal Mechanics.	4.	Agriculture (15) Dairy.	4.	Agriculture (16) Rural Economics.	4.
History (5) U. S. Political.	4.	History (5), Economics (2) Political Economy.	4.	Economics (2).	4.

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

* Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

COURSE IN HORTICULTURE AND FORESTRY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological, Economic.	5.	Botany (8) Economic Botany Vegetable Pathology	5.
Drawing (10)	2.				
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
*French (1) Elementary or *German (1) Elementary.	4.	French (1) Elementary or German (1) Elementary.	4.	French (1) Elementary or German (1) Elementary.	4.
Horticulture (1) Elements.	4.	Shopwork (1, 2) Carpentry and Forging.	3.	Horticulture (1) Elements.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Drawing (2) Lettering.	3.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.
Geology (2) General.	5.	Geology (2) General.	5.	Zoology (4) Economic Entomology.	3.
Horticulture (5) Pomology, Viticulture.	4.	Horticulture (6) Vegetables and Nursery.	4.	Horticulture (7) Small Fruits and Spraying.	4.

*Where credit is received for Elementary French or German, French (2) 4 or German (4) 4 is required.

FOURTH YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Horticulture (8) Elementary Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
Horticulture (11) Arboriculture.	2.	Horticulture (12) Forestry.	2.	Horticulture (13) Landscape Gardening.	2.
History (5) U. S. Political.	4.	History (5), Economics (2) Political Economy.	4.	Economics (2)	4.

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN DOMESTIC ECONOMY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economical Botany Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis	2.
Zoology (1) Invertebrate	3.	Zoology (1) Invertebrate	3.	Zoology (1) Invertebrate	3.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory.*	5.	Agr'l Chemistry (4) Laboratory.*	5.	Physiology (3) Chemical Physiology.*	5.
Domestic Economy (1)	4.	Domestic Economy (2)	4.	Domestic Economy (3)	4.
Drawing Mechanical.	2.	Drawing Architectural.	2.	Drawing (15) House Designing.	2.
†French (1) Elementary. or †German (1) Elementary.	4.	French (1) Elementary. or German (1) Elementary.	4.	French (1) Elementary. or German (1) Elementary.	4.
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

THIRD YEAR

REQUIRED

Domestic Economy (4)	4.	Domestic Economy (5)	4.	Domestic Economy (6)	4.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (2)	4.
History (5) U. S. Political.	4.	History (5) U. S. Political.	½.	Economics (2) Political Economy.	4.
Education (1)	4.	Economics (2) Political Economy	½.	English Literature (2)	4.
		Education (1)	½.		
		English Literature (2)	½.		

Elective: Two hours a week, through the year.

FOURTH YEAR

REQUIRED

Domestic Economy (7)	4.	Domestic Economy (8)	4.	Domestic Economy (9)	4.
Horticulture (8) Elements of Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
		Physiology (6)	2.		

* Specific laboratory work will be provided for students in this course, where necessary.

ELECTIVE

Ten hours a week through the year chosen from any of the courses given in any College of the University upon which the student is qualified to enter: except in the College of Law.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

THE SHORT COURSES

A two-year course in Agriculture and a two-year course in Domestic Economy have been provided for those who have neither the time nor the means to pursue four-year courses. These short courses also enable those who lack the preparation for entering the four-year courses to obtain such preparation. The studies of the first year of the short courses, it will be noticed, nearly prepare the student to enter the first year of the four-year courses. The student having had chemistry in the first year of a short course can finish his preparation for either of the four-year courses during the first year of the latter course, in place of the chemistry required.

At the end of the first year of the Short Course in Agriculture, for example, the student has three strings to his bow. He may finish the second year of the short course by taking the more technical studies from the four-year courses, if lack of time or means demands it; or he may enter either the four-year course in Agriculture or the four year course in Horticulture and Forestry. The same is practically true of the Short Course in Domestic Economy.

These short courses are not, of course, to be compared in breadth, strength, or thoroughness with the full courses of the University. They are far better preparation for the work to which they lead than no prepration; but all students are urged to take or to continue into the full four-year courses wherever possible.

ADMISSION TO THE SHORT COURSES IN AGRICULTURE AND DOMESTIC ECONOMY AND THE COURSE IN DAIRYING

Applicants must be at least fifteen years of age, and unless over twenty-one years of age must pass an examination in *Arithmetic*, *Geography*, *Grammar* and *United States History*, or bring High School or other certificates for those branches. Applicants who are over twenty-one are admitted without examination.

THE SHORT COURSE IN AGRICULTURE

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3) Geometery.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Drawing (10) Mechanical.	2.	Shopwork (1,2) Carpentry, Forging.	3.	Physiology (2) General.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Not less than fifteen hours per week through the year; chosen from any of the following course subject to conditions named under "Departments of Instruction."

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
Botany (6) Physiological.	5.	Agriculture (15) Dairy	4.	Zoology (7) Entomology.	3.
Horticulture (1) Elements.	4.	Horticulture (1) Elements.	4.	Horticulture (1) Elements.	4.
Veterinary Medicine (28) Anatomy.	5.	Veterinary Medicine (29) General Pathology.	5.	Veterinary Medicine (30) Special Pathology.	5.
Horticulture (5)	4.	Horticulture (6)	4.	Horticulture (7)	4.
		Physiology (6)	2.		
Cadet Service.		Cadet Service.		Cadet Service.	

COURSE IN DAIRYING

The course in dairying begins each year on the Wednesday following the first day of January, and continues during the entire term. Butter-making, as practiced in the farm dairy and in the creamery, is thoroughly taught. The student performs all necessary operations in the manufacture of butter by these two methods, under the guidance of the instructors. In cheese-making the principles are taught, with elementary practice.

Agriculture (5). Dairy Farming.—Three hours each week. Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms.

Agriculture (6). Butter and Cheese-making.—Four half days each week. Laboratory practice in running separator, churning, working butter, making cheese, milk testing, etc.

Agriculture (7). Butter and cheese-making.—Two hours each week. Lectures and recitations.

Agricultural Chemistry (7). Milk Chemistry and Milk Testing.—Two hours each week. Lectures and laboratory practice.

Physiology (6). Bacteria in their relation to Milk, Butter and Cheese.—Two hours each week. Lectures and laboratory practice.

Veterinary Medicine (17). Diseases of the Cow. Three hours each week.

Care of the Boiler and Engine.—One lecture each week during six weeks.

SHORT COURSE IN DOMESTIC ECONOMY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3 Geometery.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training	

SECOND YEAR

REQUIRED

Domestic Economy.	4.	Domestic Economy.	4.	Domestic Economy.	4.
Domestic Economy.	4.	Domestic Economy.	4.	Domestic Economy.	4.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training	

ELECTIVE

Not less than seven hours per week chosen from the following courses; subject to the conditions named under "Departments of Instruction:"

Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
English Literature.	4.	English Literature.	4.	English Literature.	4.
Horticulture (8) General Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.

COLLEGE OF ARTS, PHILOSOPHY, AND SCIENCE

FOR ADMISSION[1] TO THE COURSE IN ARTS

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar and United States History.*

2. *English*—(*a*) Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reason for seeking a University education." The second essay will be upon a subject drawn from the list of classics printed below.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words, as given in Scott and Denney's Composition-Rhetoric. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below, and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics—Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke on *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro and Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character, to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

class room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works, preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work: but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement

3. *Algebra*—Wentworth's or White's or Wells's Elements, complete.

4. *Botany*—Kellerman's Elementary Botany and Spring Flora or equivalent.

5. *Civil Government*—Fiske or Thorpe preferred.

6. *Geometry, Plane and Solid*—Venable, White, Wentworth or Wells.

7. *Greek*—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first three books of Xenophon's *Anabasis*. At least two years should be devoted to this work.

8. *History*—Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.

9. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential): Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Æneid*, with Prosody; Prose Composition, Daniell or Collar or Jones, entire.

10. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.

For the present, the *Greek* required for admission may be begun at the University, but without University credits.

TO THE LATIN COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course in Arts; except that instead of *Greek*, the applicant must offer *French* or *German*, as follows:

French—The whole subject of French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

German—Joynes-Meisser's or Thomas' Grammar is recommended. The essentials in these Grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pp.) Joynes's or Whitney's Reader, Hillern, Höher als die Kirche, Riehl, Der Fluch der Schönheit, Freytag Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the year 1899, the *German* or *French* required for admission may be begun at the University, but without University credits. For the year 1900, and thereafter, the full requirements as above stated will be held to.

TO THE MODERN LANGUAGE COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course of Arts; except that instead of *Latin* and *Greek*, the applicant may offer *Latin* and *French*, or *Latin* and *German*, or *French* and *German*, in the amounts specified above.

For the year 1899, either the *French* or the *German*, (but not both) required for admission may be begun at the University, but without University credits. For the year 1900, and thereafter, the full requirements as above stated will be maintained.

TO THE ENGLISH COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Modern Language Course in Philosophy. But in place of one of the foreign languages the applicant may offer the following group:

1. *Chemistry*—Williams or Remsen.
2. *English Literature*—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, *English History*—Montgomery.
3. *Physiology*—Martin (briefer course).

For the year 1899, one modern language required for admission may be begun at the University, but without University credits. For the year 1900, and thereafter the full requirements as above stated will be held to.

TO THE COURSE IN SCIENCE

The requirements are the same as for admission to the Modern Language Course in Philosophy.

COURSE IN ARTS

Degree: Bachelor of Arts

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek (51) Xenophon	4.	Greek (52) Herodotus. History.	4.
Latin (51) Cato, Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry. Analytics, Calculus.	3.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Practical Rhetoric.	2.
Cadet Service (men).* Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

Greek (53) Lysias.	4.	Greek (54) Homer.	4.
†History (55) United States or †Economics (51) Elementary.	4.	History (56) United States or Economics (52) Elementary.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus Juvenal.	4.
English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
*Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College; *except* that not earlier than the third year:

*A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service, under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

†The subject not taken the first Semester will be taken the second.

First: Studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

Second: Additional Studies equivalent to five hours a week for one year may be chosen by students in the course in Science from the courses taught in the College of Engineering.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
*Major Study.	5.	Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special research The subject of the research must lie in one of the branches (other than science) in which the candidate has studied during either of the last two years prior to graduation. The subject, together with a written approval of it by the head of the Department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

*Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

LATIN COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR.

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Latin (51) Cato, Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (57) Algebra, Analytics, Calculus.	3.	Mathematics (58) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Practical Rhetoric.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	
One of the following (the choice being for the year):			
Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (61) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	History (56) United States or Economics (52) Elementary.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
*English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen by students in the course in Science from the courses taught in the College of Engineering.

*The subject not taken the first semester, to be taken the second semester.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
Major Study.	5.	Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special research. The subject of the research must lie in one of the branches (other than science) in which the candidate has studied during either of the last two years prior to graduation. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

MODERN LANGUAGE COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester.	Credit hours
French	4.	French	4.
German	4.	German	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry. Analytics, Calculus.	3.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Practical Rhetoric.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	
One of the following (the choice being for the year):			
Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64)	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

French	4.	French	4
German	4.	German	4.
†History (55) United States or †Economics (51) Elementary.	4.	History (56) United States or Economics (52) Elementary.	4
Rhetoric (53) Analysis of Prose.	4.	English Literature (52) Introductory.	
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen by students in the course in Science from the courses taught in the College of Engineering.

FOURTH YEAR

Major Study.	5.	Major Study.	5
Electives (as in third year).	10.	Electives (as in third year).	10

†The subject not taken the first semester, will be taken the second semester.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special research. The subject of the research must lie in one of the branches (other than science) in which the candidate has studied during either of the last two years prior to graduation. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department within which it lies) not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

ENGLISH COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Elocution and Oratory (51)	2.	Elocution and Oratory (52)	2.
French (51) Elementary. or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
History (51) European.	3.	History (52) European.	3.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Practical Rhetoric.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	
One of the following (the choice being for the year):			
Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (54) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

English Language (51) Old English.	2.	English Langage (52) Old English.	2.
French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
†History (55) United States or †Economics (51) Elementary.	4.	History (56) United States or Economics (52) Elementary.	4.
Philosophy (53)	3.	Philosophy (54)	3.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52) Introductory.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (55)	3.	Philosophy (56).	3.
Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year, chosen from the courses in this College, *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University: provided that the studies chosen are such as the students qualified to pursue.

†The subject not taken the first semester will be taken the second.

Second: Additional studies equivalent to five hours a week for one year may be chosen by students in the course in Science from the courses taught in the College of Engineering.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
Major Study.	5.	Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN GENERAL SCIENCE

Degree: Bachelor of Science

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Mathematics (67), (65) Algebra. Analytics, Calculus. or Mathematics (55), (57) Trigonometry and Algebra.	4. 5.	Mathematics (62), (66) Trigonometry, Analytics, Calculus. or Mathematics (56), (58) Algebra and Analytics.	4. 5.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Practical Rhetoric.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

SECOND YEAR

Economics (51) Political Economy.	4.		
‡French or §German	4.	French or German	4.
Physics (51) Mechanics, Heat, etc.	3.	Physics (52) Electricity, Magnetism, etc.	3.
Physiology (51) Human Anatomy.	3.	Physiology (52) Physiology.	3.
		Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

Together with one of the following subjects, to be continued through the year:

(a) Botany (57), (58), each three hours credit or (59), (60), each five hours credit for a semester. (b) General Chemistry (53), (54), each five hours credit. (c) Geology (51), (52), and Metallurgy (52). (Geology running for two-thirds of the year and Metallurgy for one-third; total, five hours credit for the year. (d) Mathematics (59), (61), (60), (62), each five hours credit for a semester. (e) Zoology (53), (54), each three hours credit, or (55), (56), each five hours credit.

THIRD YEAR

†Geology (if not taken the second year) General or ‡French or German	5. 4.	Geology (if not taken the second year) General and Astronomy (52) General or Astronomy (54) Mathematical	5.
Philosophy (53)	3.	Philosophy (54)	3.
*Major Study.	4.	Major Study.	4.

†In the Second Semester, Geology is followed by Astronomy, which occupies the last nine weeks of the Semester.

*Major Study. Not later than the beginning of the Third Year each student shall elect a Major Study in Mathematics or in a Science in which Laboratory instruction is given. This Major study shall be in one department, or with the consent of the professors in charge, in two allied departments in this college. To the Major Study the student shall devote not less than four nor more than ten hours a week during the Fourth Year.

‡It is desired that the student on completing this course, shall possess a good reading knowledge of both French and German. Therefore, the student entering on both French and German will take both languages in the University, each for one year. He who enters on one Modern

COURSE IN COMMERCE AND ADMINISTRATION

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary	4.	French (52) Prose and Plays	4.
German (51) Elementary	4.	German (52) Elementary	4.
History (51) European	3.	History (52) European	3.
Mathematics (67) Algebra, Analytics, Calculus	3.	Mathematics (68) Trigonometry, Analytics, Calculus	3.
Rhetoric (51) Paragraph Writing	2.	Rhetoric (52) Practical Rhetoric	2.
Cadet Service (men) Hygiene and Phys. Train. (women).		Cadet Service (men) Hygiene and Phys. Train. (women).	

SECOND YEAR

French (55) Modern Literature or German (55) Literature	4.	French (56) Modern Literature or German (56) Lyrics	4.
*History (55) United States or *Economics (51) Elementary	4.	*History (56) United States or *Economics (52) Elementary	4.
History (53) England	3.	History (54) England	3.
*Rhetoric (53) Analysis of Prose or *English Literature Introductory	4.	*Rhetoric (54) Analysis of Prose or *English Literature (52) Introductory.	4.
Cadet Service (men) Hygiene and Phys. Train. (women).		Cadet Service (men) Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57) Laboratory	3.	Botany (58) Laboratory	3.
General Chemistry (51) Inorganic	3.	General Chemistry (52) Inorganic	3.
Physics 51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology	3.

* The subject not taken the First Semester will be taken the Second Semester.

THIRD YEAR

First Semester	Credit hours	Second Semester	Credit hours
*Elementary Law	6.	*Contracts	4.
Philosophy (51)	4.	Philosophy (51)	5.
†Major Study	4.	†Major Study	4.

ELECTIVE

From the list of courses mentioned below, selection may be made to make up the required number of hours. Not less than sixteen nor more than eighteen hours a week are permitted and no substitutions or options further than those indicated below.

Economics { (53) (55) (57) / (59) (63) (65) }	2 or 3.	Economics { (51) (56) (58) / (60) (64) }	2 or 3.
German	2 or 3.	German	2 or 3.
History { (57) (59) / (63) (65) }	2 or 3.	History { (58) (60) / (64) (66) }	2 or 3.
Political Science (51) 53)	2 or 3.	Political Science (52) (54)	2 or 3.
Rhetoric (57)	3.	Rhetoric (58)	3.
Romance Language	2 or 3.	Romance Language	2 or 3.

FOURTH YEAR

†Major Study	5.	†Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

At the beginning of the fourth year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

*In place of Elementary Law six hours; Commercial Law four hours and Corporations (Private and Municipal) two hours may be substituted. Also in place of Contracts four hours, any two of the following may be substituted; Corporations (Private), Insurance, Agency, Sales, Mortgages.

†Must be continued in the Department chosen in third year.

Elective: Four hours a week through the year—chosen from the courses in this College, *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any courses taught in the University; provided, that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen in the College of Engineering.

Students intending to make Mathematics a specialty will take French or German the first semester and Mathematical Astronomy the second semester. All other students will take Geology and General Astronomy.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
Major Study.	5.	Major Study.	5.
Electives.	10.	Electives.	10.

THESIS

As a requisite for graduation each student must present an acceptable thesis embodying the results of a special research. The line of research must lie within the field of the major study, and is subject to the approval of the professor or professors having the major study in charge; and the student shall enter on this work not later than the beginning of the Senior year, and shall devote to it not less than two hours a week, or its equivalent, for one year, independently of his other work. The subject of thesis, together with a written approval of it by the professor or professors directing the investigation, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day. In case two or more students are pursuing the same major study, a joint research and thesis may be made.

Language will continue that language one year in case he cannot read easy prose at sight and take the other language for one year. In case a reading knowledge of one Modern Language is possessed, the student will take the other language two years. The third year of Language in the case of students making the Mathematics a specialty will be that language of which the student has the less knowledge.

THE SPECIAL COURSES

COURSE PREPARATORY TO LAW AND TO JOURNALISM

FOR ADMISSION

The requirements for admission to any of the four courses in the College of Arts, Philosophy and Science; except that the applicant must not be less than eighteen years of age.

FIRST YEAR

First Semester	Credit hours	Second Semester.	Credit hours
English Literature (51) Introductory.	4.	Economics (52) Elementary.	4.
French (51) Elementary. or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Prose and Plays.	4.
History (51) European.	3.	History (52) European.	3.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Theme Writing.	2.
Science, Elective.	3.	Science, Elective.	3.
Cadet Service (men). Hygiene and Physical Training (women).		Cadet Service (men). Hygiene and Physical Training (women).	

SECOND YEAR

Economics (55) Practical Problems.	2.	Economics (56) Industrial and Social Reforms.	2.
Elocution (51)	2.	Elocution (52) Principles.	2.
English Literature, Elective.	2 or 3.	English Literature, Elective.	2 or 3.
History (53) England.	3.	History (54) England.	3.
History (55) United States.	4.	Rhetoric (54) Analysis and Prose.	4.
Philosophy (53) Psychology.	3.	Philosophy (54) Logic.	3.
Rhetoric (55) Newspaper work	1.	Rhetoric (56) Newspaper Work.	1.
Cadet Service (men). Hygiene and Physical Training (women).		Cadet Service (men). Hygiene and Physical Training (women).	

NOTE. - A student desiring to continue French or German may substitute French (55 and 56), or German (55 and 56), for four hours of the studies of the second year. The studies thus deferred must be taken in the third year.

THIRD YEAR

Not less than sixteen nor more than seventeen hours a week, including studies deferred from the second year; selections to be made from the following, subject to the conditions named in the "Department of Instruction." In view of the fact that this is a special course for special purposes, no substitutions or options further than those indicated below, will be permitted.

Economics (57) The Transportation Problem.	2.	Economics (58) Money and Banking.	2.
English Literature, Elective.	2 or 3.	English Literature, Elective.	2 or 3.
History (61) American History.	2.	History (62) American History.	2.

THIRD YEAR—Concluded.

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Education (57) History of Education in the United States.		2.	Education (54) History of Education in the United States.		2.
Philosophy (55) Ethics.		3.	Philosophy (56) Modern.		3.
Political Science (51) International Law.		2.	Political Science (52) Municipal Government.		2.
Political Science (53) Institutions of the U. S.		3.	Political Science (54) Comparative Institutions.		3.
Rhetoric (57) Brief Making and Argument.		3.	Rhetoric (58) Book Reviews and Criticism.		3.
Rhetoric (59) Poetics and Verse Making		2.	Rhetoric (60) Short Stories.		2.

COURSE PREPARATORY TO THE STUDY OF MEDICINE

FOR ADMISSION

Applicants must be at least seventeen years old, and must pass in *Grammar, Geography, Arithmetic, Algebra (through quadratics), Plane and Solid Geometry, Physics, Rhetoric, U. S. History, and Botany, and either Astronomy, Civil Government or General History.*

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Botany (53) Systematic and Physiological.	4.	Botany (56) (½ Semester) Medical.	1.
Latin (59) Pharmaceutical.	5.	Latin (60) Pharmaceutical.	5.
Physics (53) Mechanics, Heat, etc.	3.	Physics (54) Electricity, Magnetism, etc.	3.
		Physics (60) Laboratory.	2.
		Physiology (58) (½ Semester) Microscopy.	1.
Rhetoric (51) Paragraph Writing.	2.	Rhetoric (52) Analysis of Prose.	2.
Zoology (51) Comparative.	3.	Zoology (52) Comparative.	3.
Cadet Service (men). Hygiene and Phys. Training (women).		Cadet Service (men). Hygiene and Phys. Training (women).	

SECOND YEAR

French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physiology (51) Human Anatomy.	3.	Physiology (52) Physiology.	3.
Rhetoric (63) Advanced Rhetoric.	2.	Rhetoric (64) Advanced Rhetoric.	2.
Zoology (55) Comparative Anatomy.	5.	Zoology (56) Comparative Anatomy.	5.
Cadet Service (men). Hygiene and Phys. Training (women).		Cadet Service (men). Hygiene and Phys. Training (women).	

THIRD YEAR

French (53) Science Reading or German (53) Science Reading.	2.	French (54) Science Reading or German (54) Science Reading.	2.
Economics (51) Political Economy.	4.		
Philosophy (53) Psychology.	3.	Philosophy (54) Logic and Ethics.	3.
Pharmacy (51) General.	3.	Pharmacy (52) General Laboratory.	5.
Physiology (55) Laboratory.	5.	Physiology (56) Laboratory.	5.

THE COLLEGE OF ENGINEERING

FOR ADMISSION TO THE FOUR-YEAR COURSES, AND TO THE COURSE IN ARCHITECTURE

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar and United States History.*

2. *English*—(*a*)—Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from a list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words as given in Scott and Denney's Composition—Rhetoric. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below and from other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class, but fully one-half of the subjects upon which the pupil writes during his preparatory course should be drawn from his own observation and experience, especially subjects in description and narration

(*b*) English Classics—Questions will be set for the purpose of testing the applicant's knowledge of the subject matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar:

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII, and XXIV; The Sir Roger de Coverly Papers in *The Spectator*, Goldsmith's *The Vicar of Wakefield*, Scott's *Ivanhoe*, Cooper's *The Last of the Mohicans*, Lowell's *The Vision of Sir Launfal*, Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, IV, XXII, and XXIV; The Sir Roger de Coverly Papers in *The Spectator*, Goldsmith's *The Vicar of Wakefield*, Scott's *Ivanhoe*, Cooper's *The Last of The Mohicans*, Macauley's *Essay on Milton*, Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macauley's *Essays on Milton and Addison;* Milton's *Comus*, *Lycidas*, *L'Allegro*, *Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character, to explain words, phrases and figures, to reproduce thought, to point out characteristics of style. Systematic

classroom study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works, preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra*—Wentworth's, White's, or Well's Elements, complete.

4. *Civil Government*—Fiske or Thorpe preferred.

5. *Geometry, Plane and Solid*—Venable, Wentworth, White, or Wells.

6. *History*—Myers' General History.

7. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the De Bello Gallico.

Or *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the grammar with easy reading; the second devoted to reading good modern French with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German*—Joynes-Meissner's, or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pp.)

Joynes' or Whitney's Reader, Hillern, Hoher als die Kirche, Riehl, Der Fluch der Schonheit, Freytag, Die Verloone Handschrift, Gerstacker Irrfahrten.

For the year 1898–99 the German or French required for admission may be begun at the University, but without University credits.

8. *Physics*—Gage, Carhart and Chute, Avery or Appleton, complete.

COURSE IN CIVIL ENGINEERING

This course is arranged for students expecting to become surveyors or civil engineers. The plan of the course is to give (1) a thorough training in mathematics and mechanics, (2) the general principles underlying all branches of civil engineering, (3) the application of the general principles to the several branches of civil engineering. The subjects of land, railroad and topographical surveying are important features, and students can at once begin practical work. In the engineering work special attention is given to iron and steel bridge work, masonry construction and cement testing, road and railroad building and maintenance, water supply and the subject of the collection and disposal of sewage.

NOTE—An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

No student will be admitted to the College of Engineering who is in arrears more than fifteen hours, of which not more than five hours may be in Mathematics.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Cadet Service.		Cadet Service.		Cadet Service	

SECOND YEAR

Civil Engineering (1) Surveying	6.	Civil Engineering (4) C. E. Drawing.	4.	Civil Engineering (2) Surveying.	6.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	5.	Drawing (3) Shades, Shadows and Per	3.
Mathematics (18) Space Analy. and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity and Magnetism.	3.	Physics (2) Light and Sound.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

VOLUNTARY

French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Civil Engineering (3) Surveying.	4.	Civil Engineering (5) C. E. Drawing.	3.	Astronomy (2) Mathematical.	4.
Mathematics (8) Least Squares.	2.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (7) Bridge Strains.	5.
Geology (2) General.	5.	Geology (2) General.	5.	Drawing (7) Photography.	2.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

FOURTH YEAR

Astronomy (2) Mathematical	4.	Civil Engin'g (16) or (17) Masonry, Railways	5.	Civil Engineering (10) Sanitary Engineering	5.
		Civil Engineering (14) Testing Laboratory	2.	Law of Contracts	4.
Civil Engineering (8) Bridge Designing	5.	Civil Engineering (18) Water Supply	5.		
Civil Engineering (15) Masonry	5.	Elec. Engineering Lectures (6) Laboratory (7)	2. 2.	Geology (3) Economic	5.
Elec. Engineering Lectures (6) Laboratory (7)	2. 2.	Mech. Engineering (17) Laboratory	3.	Mech. Engineering (25) Laboratory	3.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Civil Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MINE ENGINEERING

This Course is arranged for students intending to become mining engineers and surveyors, metallurgical or technical chemists. The plan of work, therefore, while keeping mathematics, drawing and engineering prominent, also provides extended work in applied chemistry, chemical analysis, assaying, mineralogy, geology, and surveying with especial application to mines and underground work, while the treatment of ores, both mechanical in ore dressing and chemical in metallurgy, forms an important feature.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand	2.	Drawing (1) Freehand	2.	Drawing (2) Lettering	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic	5.	Chemistry (7) Inorganic	5.	Metallurgy (2) Mineralogy	3.
Mathematics (14) Trigonometry	5.	Mathematics (15) (16) Trigonometry Algebra	2, 3.	Mathematics (17) Plane Analytics	5.
Rhetoric (1) Paragraph Writing	2.	Rhetoric (1) Theme Writing	2.	Rhetoric (1) Prose Analysis	2.
Cadet Service		Cadet Service		Cadet Service	

SECOND YEAR

Drawing (3) Projections	3.	Drawing (3) Descriptive Geometry	3.	Drawing (3) Shades, Shadows and Per.	3.
Mathematics (18) Analytics and Calculus	5.	Mathematics (19) Calculus	5.	Mathematics (20) Calculus	5.
Metallurgy (5) Laboratory	5.	Metallurgy (5) Laboratory	5.	Metallurgy (5) Laboratory	5.
Physics (2) Mechanics and Heat	3.	Physics (2) Electricity and Magnetism	3.	Physics (2) Light and Sound	3.
Shopwork (1) Woodwork	2.	Shopwork (2) Forging	2.	Shopwork (4) Chipping and Filing	2.
Cadet Service		Cadet Service		Cadet Service	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year	2.	or Rhetoric (4)	2.

THIRD YEAR

Mech. Engineering (6) Mechanics	5.	Mech. Engineering (6) Mechanics	5.	Mech. Engineering (7) Strength of Materials	5.
Metallurgy (4) Fuels and Iron	5.	Metallurgy (4) Steel, Copper, Gold, etc.	5.	Civil Engineering (19) Bridge Strains	5.
Mine Engineering (4) Mine Surveying	5.	Metallurgy (6) Assaying	5.	Metallurgy (3) Deter. Mineralogy	5.
Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.

FOURTH YEAR

Elec. Engineering Lectures (6) Laboratory (7)	2. 2.	Elec. Engineering Lectures (6) Laboratory (7)	2. 2.	Geology (3) Economic	5.
Geology (2) General	5.	Geology (2) General	5.	Mine Engineering (6) Plans and Specifications	5.
Mine Engineering (5) Mine Engineering	5.	Metallurgy (7) Metal. Construction	3.	Mine Engineering (5) Mine Engineering	5.
Metallurgy (8) Ore Dressing	2.	Mine Engineering (5) Mine Engineering	5.	Drawing (7) Photography	2

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Metallurgy or of Mine Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MECHANICAL ENGINEERING

This Course has for its first object the qualifying of men for the mechanical engineering profession. It aims to embrace preparation for such lines of pursuit as the successful management of machinery in manufacturing establishments; the superintendence of construction; the designing and laying out of machinery plants for mills and factories; the construction of machines for particular purposes, and the designing and drawing of the same, the making of calculations respecting strength, shocks, proportion, endurance, and suitability of material for specific purposes.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full discription of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand	2.	Drawing (1) Freehand	2.	Drawing (2) Lettering	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic	5.	Chemistry 7) Inorganic	5.	Shopwork (1) Carpentry and Pat'n Mak'g	4.
Mathematics (14) Trigonometry	5.	Mathematics (15) (16) Trigonometry Algebra	2, 3.	Mathematics (17) Plane Analytics	5.
Rhetoric (1) Paragraph Writing	2.	Rhetoric (1) Theme Writing	2.	Rhetoric (1) Prose Analysis	2.
Cadet Service		Cadet Service		Cadet Service	

SECOND YEAR

Drawing (3) Projections	3.	Drawing (3) Descr. Geometry	3.	Drawing (3) Shades, Shadows and Per.	3.
Mathematics (18) Analytics and Calculus	5.	Mathematics (19) Calculus	5.	Mathematics (20) Calculus	5.
Physics (2) Mechanics and Heat	3.	Physics (2) Electricity and Magnetism	3.	Physics (2) Sound and Light	3.
		Physics (7) Laboratory	2.	Physics (7) Laboratory	3.
Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.
Shopwork (2, 3) Forging and Foundry	5.	Shopwork (4) Chipping and Filing	3.	Shopwork (5) Machine work	3.
Cadet Service		Cadet Service		Cadet Service	

VOLUNTARY

French (3)	2.	or German (2) Each for the year	2.	or Rhetoric (4)

THIRD YEAR

Drawing (5) Technical	3.	Mech. Engineering (6) Mechanics	5.	Drawing (7) Photography
Mathematics (11) Differential Equations	1.	Mech. Engineering (22) Timber and Masonry	3.	Civil Engineering (19) Bridge Strains

THIRD YEAR—Concluded.

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Mech. Engineering (6) Mechanics	5.	Mech. Engineering (3) Mechanism	5.	Mech. Engineering (7) Strength of Materials	5.
Metallurgy (4) Fuels and Iron	5.	Metallurgy (4) Steel	2.		
Shopwork (6) Advanced Machine Work	3.	Shopwork (6) Advanced Machine Work	4.	Mech. Engineering (3) Mechanism	2.
Mech. Engineering (12) Laboratory	2.			Industrial Arts (5) Machine Design	5.

FOURTH YEAR

Elec. Engineering Lectures (6)	2.	Elec. Engineering Lectures (6)	2.	Industrial Arts (5) Shop Appliances	3.
Laboratory (7)	2.	Laboratory (7)	2.		
Mech. Engineering (13) Laboratory	4.			Mech. Engineering (10) Steam Boilers	5.
Mech. Engineering (8) Thermodynamics	5.	Mech. Engineering (9) Prime Movers	5.	Mech. Engineering (15) Laboratory	3.
		Mech. Engineering (14) Laboratory	4.	Mech. Engineering (20) Hydraulic Mach.	2.
Mech. Engineering (18) Mach. Design	5.	Mech. Engineering (18) Mach. Design	5.	Mech. Engineering (21) Thesis Work	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Mechanical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ELECTRICAL ENGINEERING

The object of this Course is to prepare students for the various pursuits in which the applications of electricity are prominent. Physics, especially theoretical and applied electricity, and mechanical engineering are naturally the leading subjects of the Course. General theory is treated in ample breadth, and is tested by experiments in well equipped laboratories. The laboratories are so conducted as to afford the student a degree of facility in the use of instruments and machinery only acquired by continued practice.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shop Work (1) Carpentry and Pat'n Mak'g	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analytics.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shade, Shadows and Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.

SECOND YEAR—Concluded.

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Physics (2) Mechanics.	3.	Physics (2) Electricity, Magnetism	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (2) Forging.	2,	Physics (5) Laboratory.	3.	Physics (5) Laboratory.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (4) Chipping and Filing.	2.	Shopwork (5) Machine Work.	2.		
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Drawing (5) Technical.	3.	Shopwork (6) Advanced Machine Work.	4.	Industrial Arts (6) Machine Design.	5.
Mathematics (11) Differential Equations.	1.	Mech. Engineering (3) Mechanism.	5.	Mech. Engineering (16) Laboratory.	4.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Physics (6) Laboratory.	5.	Physics (6) Laboratory.	5.	Physics (6) Laboratory.	5.
Physics (4) Electricity and Magnetism.	3.				

FOURTH YEAR

Elec. Engineering (2) Elec. Machinery.	5.	Elec. Engineering (2) Elec. Machinery.	5.	Elec. Engineering (2) Elec. Machinery.	5.
Elec. Engineering (3) Designing and Drawing.	3.	Elec. Engineering (3) Designing and Drawing.	3.	Elec. Engineering (3) Designing and Drawing.	3.
Elec. Engineering (4) Laboratory	5.	Elec. Engineering (4) Laboratory and Thesis.	5.	Elec. Engineering (4) Laboratory and Thesis.	5.
Mech. Engineering (8 Thermodynamics.	5.	Mech. Engineering (9) Prime Movers.	5.	Mech. Engineering (10) Steam Boilers.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the result of a special study. The subject of such study must lie within the field of Electrical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CERAMICS

This Course is designed to create a class of engineers who shall be fitted to render to the Clay, Glass and Cement Industries, the same kind of services which have long been rendered to Mining and Metallurgical Industries by graduates of Schools of Mines.

The problems of the Ceramic Industries are not unlike those of the Mining Industries, either in kind or in adaptation to methods of technical control; but the information and scientific equipment necessary to solve these problems successfully are peculiar to those industries alone, and in the past have received little or no attention from technical schools in this country.

This course is offered with the hope of filling this long standing gap in the scheme of engineering education in this country. It is essentially an Engineering Course, following closely the lines of the other engineering courses, up to the end of the second year. In the last two years, the training specializes along the lines of Ceramics and of the application of Chemistry to this subject.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand	2.	Drawing (1) Freehand	2.	Drawing (2) Lettering	3.
Chemistry (7) Inorganic	5.	Chemistry (7) Inorganic	5.	Metallurgy (2) Mineralogy	3.
German (1) or (4)	4.	German (1) or (4)	4.	German (1) or (4)	4.
Mathematics (14) Trigonometry	5.	Mathematics (15), (16) Trigonometry Algebra	2, 3.	Mathematics (17) Plane Analytics	5.
Rhetoric (1) Paragraph Writing	2.	Rhetoric (1) Theme Writing	2.	Rhetoric (1) Prose Analysis	2.
Cadet Service		Cadet Service		Cadet Service	

SECOND YEAR

Ceramics (1) Laboratory	5.	Ceramics (2) Laboratory	5.	Ceramics (3) Laboratory	5.
Drawing (3) Projections	3.	Drawing (3) Descriptive Geometry	3.	Drawing (3) Shades, Shadows and Per.	3.
Mathematics (18) Analytics and Calculus	5.	Mathematics (19) Calculus	5.	Mathematics (20) Calculus	5.
Physics (2) Mechanics and Heat	3.	Physics (2) Electricity and Magnetism	3.	Physics (2) Light and Sound	3.
Shopwork (1) Woodwork	2.	Shopwork (2) Forging	2.	Shopwork (4) Chipping and Filing	2.
Cadet Service		Cadet Service		Cadet Service	
		VOLUNTARY			
French (3)	2.	or German (2) Each through the year	2.	or Rhetoric (4)	2.

THIRD YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Ceramics (4) General Principles	5.	Ceramics (5) Bricks	5.	Ceramics (6) Pottery	5.
Mine Engineering (4) Mine Surveying	5.	Ceramics (7) Advanced Chemical Laboratory Work	5.	Ceramics (8) Advanced Chemical Laboratory Work	5.
Mech. Engineering (6) Mechanics	5.	Mech. Engineering (6) Mechanics	5.	Mech. Engineering (7) Strength of Materials	5.
Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.	Rhetoric (3) Advanced	2.

FOURTH YEAR

Ceramics (9) Manufacture of Bodies	5.	Ceramics (10) Glasses and Glazes	5.	Ceramics (11) Enamels and Colors	5.
Drawing (7) Photography	2.	Ceramics (12) Cement	5.		
Geology (2) General	5.	Ceramics (13. Ceramic Construction	2.	Ceramics (15) Thesis Work	5.
Metallurgy (4) Fuels and Iron	5.	Ceramics (14) Reports on Clay Prop.	5.	Geology (3) Economic	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Ceramic Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN INDUSTRIAL ARTS

This course is designed to furnish a strong basis for those wishing to become teachers of Manual Training and for those intending to enter the various branches of manufacture and industry, not as engineers, but as practical managers, superintendents or business men. The required part of the course combines with a general science training a large amount of drawing and shop work, in which the underlying principles and methods employed in various branches of industry are dwelt on. Large liberty of election of studies is allowed the student. His election, properly exercised, together with the required work will equip the student for a wide range of occupations along the lines stated. The aim of the course is educational as well as professional, the training of the mind and hand together.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows the statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.
Drawing (8) Geometric.	2.	Drawing (8) Projections.	2.	Drawing (2) Lettering.	2.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Shop Work (1) Carpentry and Pattern Making.	3.	Shop Work (1) Carpentry and Pattern Making.	3.	Shop Work (1) Carpentry and Pattern Making.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives, three to five hours—any work upon which the student is qualified to enter, in any College except the College of Law.

At some time during the Course, the student must elect in Chemistry the equivalent of at least five hours for two terms.

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows and Per.	3.
Physics (3) Mechanics and Heat.	3.	Physics (2) Electricity.	3.	Physics (2) Sound and Light.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shop Work (3) Foundry.	3.	Shop Work (2) Forging.	3.	Shop Work (2) Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives, six to eight hours—any work upon which the student is qualified to enter, in any College except the College of Law.

THIRD YEAR

Drawing (5) Technical.	3.	Industrial Arts (2) Tech. Drawing.	3.	Industrial Arts (2) Tech. Drawing.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Shop Work (4) Chipping and Filing.	3.	Shop Work (5) Machine Work.	3.	Shop Work (5) Machine Work.	3.

Electives, eight to ten hours—any work upon which the student is qualified to enter, in any College except the College of Law.

FOURTH YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Industrial Arts (3) Shop Equipment.	3.	Industrial Arts (3) Shop Appliances.	3.	Industrial Arts (3) Shop Management.	3.
Industrial Arts (4) Tech. Drawing.	3.	Industrial Arts (4) Tech. Drawing.	3.	Industrial Arts (4) Tech. Drawing.	3.
Shop Work (6) Machine Work.	3.	Shop Work (6 Machine Work.	3.	Shop Work (6) Machine Work.	3.

Electives, eight to ten hours—any work upon which the student is qualified to enter, in any College except the College of Law.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special study. The subject of such study must lie within the field of Industrial Arts. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CHEMISTRY

The object of this Course is to prepare students for work in Industrial Chemistry or Metallurgical Chemistry, according to electives chosen. With proper electives it will also be found a desirable course for students expecting to become general analytical chemists.

The electives are subject to the approval of the head of the department of Chemistry, or of Metallurgy and Mineralogy for students in Metallurgical Chemistry.

NOTE—The figure in parenthesis following the name of each study indicates the number of the study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	2.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Inorganic.	5.
German (1) or (4)	4.	German 1) or (4)	4.	German (1) or (4)	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15) (16) Trigonometry, Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Chemistry (4) Quantitative.	5.	Chemistry (4) Quantitative.	5.	Chemistry (4) Quantitative.	5.
German (2) Scientific Reading.	2	German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity and Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (1) Woodwork.	3.	Shopwork (1) Woodwork.	3.	Metallurgy (2) Mineralogy.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives three to five hours throughout the year.

The following are suggested: Mathematics (18, 19, 20), 5 hours; Drawing (3), 3 hours; Physiology (3), 3 hours; History (5), 4 hours; Economics (1), 4 hours.

THIRD YEAR

Chemistry (8) Organic.	5.	Chemistry (9) Organic.	5.	Chemistry (9) Organic.	5
Metallurgy (5) Laboratory.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (5) Laboratory.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

Electives five to eight hours throughout the year.

The following are suggested: Physical Laboratory, 3 to 5 hours; Geology 5 hours—or Geology and Determinative Mineralogy, 5 hours; Shopwork, 3 hours.

FOURTH YEAR

Chemistry (17) Inorganic Preparations	4.	Chemistry (14) Theoretical	3.	Chemistry (15) Sanitary	4.
Metallurgy (4) Fuels and Iron	5.	Chemistry (16) Applied	3.	Ceramics (16) Applied	3.
		Physiology (8) Bacteriology	2.		

Electives to make the total work equal sixteen or eighteen hours, including Thesis work.

Students in Metallurgical Chemistry will take Ore Dressing the first term, and Metallurgy (4) 5, through the second term. For such students Chemistry (14, 15, 16) and Physiology (8) will not be compulsory.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of the study must lie within the field of Chemistry or Metallurgy. The subject must be announced to the President of the University (dependent upon the approval of the head of the department), not later than the beginning of the second term of t he fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ARCHITECTURE

This Course was established in 1896, to meet a growing demand for special training along this line. The extremely rapid developments, in late years, of novel methods of construction, the constantly extending list of materials used, and the creation of types of building entirely without precedent in the history of architecture, render it not only desirable, but imperative, that a large class of thoroughly trained and equipped men shall be brought forward, if this progress is to be maintained.

The employment in architecture of so many young men trained in other branches of engineering seems to prove the urgent need of those whose training is directed expressly to this end.

The Course offered gives a good training in mathematics, physics and mechanics, which are fundamental, together with a thorough drill in drawing, designing, shop work, and the more technical branches of architecture proper.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows the statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand	3.	Drawing (1) Freehand	3.	Drawing (1) Water Color	3.
Chemistry (7) Inorganic	5.	Chemistry (7) Inorganic	5.	Drawing (2) Lettering	3.
Mathematics (14) Plane Trigonometry	5.	Mathematics (15), (16) Trigonometry, Algebra	2, 3.	Mathematics (17) Plane Analytics	5.
Rhetoric (1) Paragraph Writing	2.	Rhetoric (1) Theme Writing	2.	Rhetoric (1) Prose Analysis	2.
Shop Work (1) Carpentry and Pattern Making	3.	Shop Work (1) Carpentry and Pattern Making	3.	Shop Work (1) Carpentry and Pattern Making	3.
Cadet Service		Cadet Service		Cadet Service	

SECOND YEAR

Drawing (7) Photography	2.	Architecture (1) Orders	5.	Architecture (2) Styles	5.
Drawing (8) Projections	3.	Drawing (3) Descriptive Geometry	5.	Drawing (3) Shades, Shadows and Per.	5.
Drawing (14) Pen	2.	Drawing (12) Clay Modelling	2.	Drawing (12) Clay Modelling	2.
Greek (1) Ancient Art	2.	Greek (1) Ancient Art	2.	Greek (1) Ancient Art	2.
Physics (2) Mechanics and Heat	3.	Physics (2) Electricity and Magnetism	3.	Physics (2) Light and Sound	3.
Mechanical Eng. (23) Materials of Construction	5.				
Cadet Service		Cadet Service		Cadet Service	

THIRD YEAR

Architecture (3) Designing	5.	Architecture (3) Designing	5.	Architecture (3) Designing	5.
Architecture (4) Specifications	2.	Architecture (5) Decorations	3.	Architecture (6) Estimates	4.
Civil Engineering (15) Masonry	5.	Architecture (7) Heating	5.	Architecture (8) Designing	5.
Civil Engineering (20) Roof Trusses	5.	Civil Engineering (9) Stereotomy	4.	Civil Engineering (21) Surveying	3.

REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES IN MINING, IN CLAY-WORKING AND CERAMICS, AND IN INDUSTRIAL ARTS

Applicants must be not less than sixteen years of age; and unless they are over twenty-one years of age must pass an examination in Arithmetic, Geography, Grammar and Orthography, or bring High School or other certificates for these branches.

Applicants who are over twenty-one years of age are admitted without examination.

SHORT COURSE IN MINING

The Short Course in Mining is especially designed for young men who have had a practical experience in mines, and wish to study Mine Surveying, Drafting, the problems of Ventilation, Drainage, Haulage, Mine Operating, etc., and also something of the sciences bearing upon their work, but have neither the time nor the preparation for a full college course. The first year is devoted to a thorough study of the elementary mathematics and sciences necessary to prepare the student for the practical work of the second year. The experience of the past eight years has shown beyond any doubt that any enterprising young miner can master the subject sufficiently well in the time assigned to materially increase his earning capacity and chances for promotion in his occupation.

Personal instruction is given, and it is made thoroughly practical and of such a character as to best adapt it to the needs of the individual student.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mathematics (2) Algebra	5.	Mathematics (2) Algebra	5.	Mathematics (2) Algebra	5.
Mathematics (3) Geometry	5.	Mathematics (13) Geometry	5.	Mathematics (14) Trigonometry	5.
Physics (1) Elementary	5.	Physics (1) Elementary	5.	Geology (1) Phys. Geography	5.
Cadet Service		Cadet Service		Cadet Service	

SECOND YEAR

Drawing (1) Freehand	2.	Drawing (4) Draughting	3.	Drawing (2) Lettering	2.
Drawing (3) Projections	3.	Geology (4) Elementary	5.	Metallurgy (9) Mineral Chemistry	5.
General Chemistry (7) Inorganic	5.	General Chemistry (13) Laboratory	3.	Mine Engineering (3) Mine Operating	5.
Mine Engineering (1) Mine Surveying	5.	Mine Engineering (2) Ventilation and Haulage	5.	Shop Work (2) Forging	3.
Cadet Service		Cadet Service		Cadet Service	

SHORT COURSE IN CLAY-WORKING AND CERAMICS

The two-year or Industrial Course is designed to assist young men who have already been actively engaged in the Ceramic industries, and who, on account of mature years, or lack of means, or lack of previous educational advantages, are unable to avail themselves of the full and complete course, and yet who wish to increase their earning power or chances of promotion by fitting themselves for other than routine labor The requirements for admission to this course are very low, and the work required throughout is much less severe than that of the four-year course; in fact anyone who is willing to really apply himself, can retain his membership in this class, but there is no place for any but those who are thoroughly in earnest, and poor work will not be accepted from those who are able to do good work.

In short, in this Industrial Course, the department recognizes its closest medium of communication with the wants of the clay industries, and it is intended to so maintain this course as always to render the greatest good to the greatest number.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows the statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Gen. Chemistry (7) Inorganic.	5.	Gen. Chemistry (7) Inorganic.	5.	Gen. Chemistry (12) Analytical.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Mathematics (1) Algebra.	5.	Mathematics (3a) Geometry.	5.	Shop Work (2) Forging.	3.
				Shop Work (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Ceramics (1) Analysis of Limestones, etc.	5.	Ceramics (2) Analysis of Clays.	5.	Ceramics (3) Analysis of Glazes.	5.
Ceramics (4) Gen. Principles.	5.	Ceramics (5) Brick.	5.	Ceramics (6) Pottery.	5.
Geology (2 General.	5.	Drawing (11) Mechanical.	5.	Geology (3) Economic.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

SHORT COURSE IN INDUSTRIAL ARTS

This Course is primarily designed to extend the benefits of the same kind of training as that given in the four-year course in this subject to that class of young men who may be unable for any reason to undertake a course of four years' duration, but who aspire to become actively engaged in factory work. It has been the aim to give, in as condensed a form as possible, those studies which will most rapidly and easily be turned to practical account in manufacturing operations; such as drawing, shop work, use of machine tools, etc., together with a grounding in the physics and mathematics which underlie these operations.

The Course will be found most valuable to young men already engaged in factory work, who find themselves limited from rising in their work on account of lack of technical education.

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.
Drawing (8) Geometric.	2.	Drawing (8) Projections.	2.	Drawing (2) Lettering	2.
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Space Geometry.	5.	Mathematics (14) Trigonometry.	5.
Shop Work (1) Carpentry and Pattern Making.	3.	Shop Work (1) Carpentry and Pattern Making.	3.	Shop Work (2) Forging.	3
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows and Per.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Shop Work (3), (4) Foundry and Chipping and Filing.	5.	Shop Work (5) Machine Work.	5.	Shop Work (6) Machine Work.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

THE COLLEGE OF LAW

FOR ADMISSION[1]

(Until September, 1901)

The following are the requirements:

1. To the First Year—Applicants for admission to the First Year must present satisfactory evidence (by teacher's certificate—High School, Academy or College diploma—or by examination) of having a good common school education, including *United States History, Civil Government* and a thorough training in *English Composition.*

2. The Second Year—In addition to the requirements for admission to the First Year, applicants for admission to the Second Year must present satisfactory evidence of having completed the work of the First Year or its equivalent.

3. To the Third Year—In addition to the requirements for admission to the Second Year, applicants for admission to the Third Year must present satisfactory evidence of having completed the work of First and Second Years, or its equivalent.

Students seeking a degree must, at the time of registration, present in addition to the requirements above mentioned satisfactory evidence of having completed a course of study, the minimum requirement of which is as follows:

Arithmetic, Civil Government, Geography, Grammar, History of the United States, Physical Geography, Physiology, Rhetoric, Physics, (Gage or an equivalent) *Geometry, Algebra* (Wentworth's elements or an equivalent); and, in addition, the equivalent of 75 hours per week for one term of 12 weeks (a total of 900 hours) chosen from any five or more of the following subjects, one at least being a Science and two at least being in History or Political Science (unless the applicant is especially permitted to offer approved substitutes): *Botany, Chemistry, English Constitutional History, English History, English Literature, French, Geology, General History, German, Greek, Latin, Logic, Physics, Political Economy, Psychology, Surveying, Trigonometry, United States Constitutional History; provided,* that not less than 65 hours for twelve weeks (a total of 780 hours) of this work shall be of collegiate or university grade. If this last mentioned work has been done by the candidate in a College or University of good standing, certificates of such institution will be accepted. In all other cases the candidate is subject to examination on the work required from this last group. In general, in the absence of satisfactory certificates, opportunity will be given for examination in any subject required for admission as above indicated. Blanks for applications for degrees will be furnished on request.

FOR ADMISSION

(On and after September, 1901)

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English*—(*a*) Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from the list of classics printed below.

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

216556

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words, as given in Keeler's English Composition, Hill's Elements of Rhetoric, or Genung's Outlines of Rhetoric. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration

(*b*) English Classics—Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knightes Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro, Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character, to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic class room study of the text themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works, preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra*—Wentworth's or White's or Wells's Elements, complete.

4. *Botany*—Kellerman's Elementary Botany and Spring Flora.

5. *Civil Government*—Fiske or Thorpe preferred.

6. *Geometry, Plain and Solid*—Venable, Wentworth or Wells.

7. *History*—Either Myers' General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.

8. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.

9. Any two of the following languages, in the quantity indicated below, Latin, Greek, French or German, or any one of them and the group of subjects named under (*c*) below.

(*a*) *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Æneid*, with Prosody; Prose Composition, Daniell or Collar or Jones, entire.

(*b*) *Greek*—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first four books of Xenophon's *Anabasis.* At least two years should be devoted to this work.

(*c*) *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

(*d*) *German*—Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax. The following books or their equivalents must have been read (not less than 600 pages). Joynes' or Whitney's Reader; Hillern's *Höher als die Kirche;* Riehl's *Der Fluch der Schönheit;* Freytag's *Die Verlorne Handschrift, Gerstäcker Irrfahrten.*

(*e*) While the preferred requirement is that each candidate shall offer any two of the foregoing languages, he will be permitted to offer in place of one of the two the following group:

1. *Chemistry*—Williams' or Remsen's.
2. *Physiology*—Martin's (briefer course)
3. *English Literature*—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, English History, Montgomery.

In addition to the foregoing requirements for admission to the work of the College, *each candidate for a degree* must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts Philosophy and Science, of this University. Where this work has been done in a college or university of approved standing, the certificate of said college or university will be accepted. In all other cases the candidate will be subject to examination in such work.

COURSE IN LAW

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Elementary Law (including Domestic Relations)	15	Agency	2
		Contracts	4
		Criminal Law	3
		Sales	2
		Torts	4
	15		15

TEXT BOOKS

First Semester—Elementary Law (Robinson, Walker and Blackstone).

Second Semester—Agency (Mechem); Contracts (Bishop); Criminal Law (Clark); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Bailments	4	Construction of Contracts	2
Commercial Law	4	Evidence	2
Evidence	2	Partnership	2
Pleading	4	Pleading	2
Moot Court	1	Real Property	4
		Wills	2
		Moot Court	1
	15		15

TEXT BOOKS

First Semester—Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

Second Semester—Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

THIRD YEAR

First Semester		Second Semester	
Circuit and Supreme Court Practice	1	Corporations (Private)	2
Constitutional Law / International Law	4	Corporations (Municipal) Negligence of	2
Corporations (Private)	2	Ethics	1
Corporations (Municipal)	2	Federal Practice	2
Equity Jurisprudence	4	Insurance	2
Probate Law	2	Mortgages / Suretyship	2
Moot Court	1	Trial Pratice	2
		Moot Court	1
	16		14

Thesis for graduation to count for two hours through second semester.

TEXT BOOKS

First Semester—Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman,); Equity Jurisprudence (Fetter).

Second Semester—Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones).

PURPOSE AND METHODS

It is the purpose of this College to furnish such legal training as will secure the most favorable judgment of the profession, and such as will fit students for practice in any part of the country.

The aim is to teach an accurate knowledge of the principles of the law, and to illustrate the application of these principles to the practical affairs of life—to teach students both to know and to apply the law. The instruction offered includes a Course containing three years of nine months each. It requires about fifteen hours of lecture and recitation work per week each year, and embraces all the elementary and practical studies necessary for admission to the Bar of any State administering the Common Law.

The methods of instruction combine the advantages of all approved systems and appliances—the text-book and recitation system, the lecture system, and the case system. Charts, outlines, analyses, essays, note-taking, oral and written lectures, reviews and examinations are used; and exercises are given in drafting contracts, abstracts, conveyances, wills, protests, mercantile contracts, pleadings, indictments, and other legal papers. Briefs, arguments in moot courts, etc., are required. Attention is given to the study and accurate analysis of leading cases.

GENERAL REGULATIONS

IRREGULAR STUDENTS

In special cases, students who have had part of the studies of the First Year and part of those of the Second Year, or part of those of the Second year and part of those of the Third Year, may be examined on whatever subjects they may select and may take part of the studies of both years, if the Faculty is satisfied that the applicants can do so to advantage. If candidates for a degree, such applicants must meet all the other requirements and have all the other qualifications of those seeking a degree.

SPECIAL STUDENTS

Persons wishing a knowledge of legal principles *for business purposes only*, but not intending to apply for a degree or to take a full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem expedient. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitation, etc., with the Dean.

ENTRANCE EXAMINATIONS

Entrance examinations, except for those seeking a degree, will not be technical; the object being to ascertain the results of previous training and practical capacity to appreciate the technical study of the law. All entrance examinations will be conducted in writing.

PRIOR READING OF LAW

Although prior reading of law is not required for admission, it is nevertheless very desirable; and it is to be hoped that in the near future this requirement for admission can be made. Before entering the College of Law, careful study of either Walker's American Law Blackstone's Commentaries, Pomeroy's Municipal Law, Smith's Elements of Law, Powell's Analysis of American Law, Robinson's Elementary Law, or Baird and Babcock's Guide to the Law, will prove of great advantage.

It is believed, also, that all students will be greatly benefited by reading Bishop's First Book of the Law, Hoffman's Legal Studies, Sharswood's Law Lectures, Warren's Law Studies, Washburn's Lecturers on the Study and Practice of the Law, or Reed's American Law Studies.

APPLICATIONS FOR DEGREES

At the time of registration all applicants who seek degrees should present their diplomas and certificates of work done. These certificates should state in detail the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate in it. A copy of the course of study should accompany the certificate in all cases, and must accompany it where equivalents are offered. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request.

EXAMINATIONS

Examinations are held from time to time to test the student's knowledge of the work he has gone over. They are usually written, but sometimes oral.

THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, at least six weeks before the end of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with the approval of the professor giving instruction in that division of law from which the subject is chosen.

DEGREES

The degree of Bachelor of Laws (LL. B.) will be conferred on all who, being twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least one year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other approved University or College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis; the subject of which has been chosen from the field included in the Graduate year.

CERTIFICATES OF WORK DONE

Those who have completed the studies of the College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

ADMISSION TO THE BAR

The regular Supreme Court examination for the admission to the bar is held on the second Tuesday in June of each year. Seniors, if eligible, are recommended to take this examination.

COURSE OF INSTRUCTION

The Course of Study is three years of nine months, or thirty-six weeks, each; covering about fifteen hundred hours of work. It is so arranged that each class will have an average of three recitations a day, of an hour in length, thereby doing the same amount of work that is done in a regular University course.

MOOT COURT

Second Year and Third Year students will have Moot Court, under the supervision of the Dean, throughout the year, not less than one hour each week. The object of Moot Court is to give practical insight into the conduct of trials, examination of witnesses, production of evidence, etc.

ADVANTAGES

LOCATION

Attention is called to Columbus as a place in which to study law. Here the Legislature meets. Here are the Supreme Court and Circuit Court; four branches of the Common Pleas Court, in almost daily session throughout the college year; the Probate Court, the County Commissioners, the City Court, the several Magistrates' Courts; also the U. S. Circuit and District Courts. All are easy of access from the College. "There is no place where law is learned so quickly and thoroughly as among the lawyers. No teaching is so effective as the object lessons of the trial of cases in court."

LIBRARIES

The following libraries are accessible to the student:

The Law Library of the College contains the Noble Law Library, the Emerson-McMillin Law Library, the Critchfield Law Library, and three sets of the Ohio and the Ohio State Reports; about 2,500 well selected volumes. It is shelved with the other Libraries of the University, in Orton Hall.

The University Library contains 25,000 volumes of very carefully selected books upon all subjects. This is quite complete in the more recent standard works upon history and political science, philosophy, etc. A good collection of the leading scientific, technical and literary magazines and journals is to be found here.

The State Law Library, of about 15,000 volumes—the largest and most complete Law Library in the State. It contains complete sets of the English Scotch, Irish, Canadian, United States, and State Reports, Statutes and Digests, as well as all the important text books and leading periodicals published. This library is located in the State House, and because of the small space available must be used with great care and discretion in order that all may be served. It is designed wholly for reference, and students are warned that they must not use the library rooms as a study room, and that the text books found here are to be used for reference only No student is expected, nor will he be permitted, to use these books instead of providing himself with those required in the course.

The State Library, in the State House—a library of general literature, history science, biography, political and social science, philosophy, etc., comprising some 65,000 volumes. The leading magazines, journals, etc., are also to be found here.

The University Libraries are open from 7:30 A. M. to 9:30 P. M. during the five days in which the University is in session, and on Saturdays from 8 A. M. to 4 P. M. The State Law Library is open six days in the week, from about 8:30 A. M. to 5:30 P. M., with the exception of about an hour or an hour and a half at noon. The State Library is open six days in the week from 9 A. M. to 12 M., and from 2 P. M. to 5 P. M.; and when the Legislature is in session, from 7 P. M. to 9 P. M.

The City Library may also be used by students, under reasonable restrictions.

THE UNIVERSITY COURSES

Attention is called to the great advantage of attending a law school in close and vital connection with the University affording the means of a liberal, practical and technical education. Students who are disposed to work faithfully may, at the same time that they are acquiring a technical knowledge of the law, supplement their general education by joining University classes, in departments which they may elect, subject to the requirements for admission to such departments, without extra charge except for laboratory work. Not alone from the courses in History and Political Science, or from those in Mental and Moral Philosophy, should this work be selected, but also from the courses in Civil, Mine, Mechanical, and Electrical Engineering, from the courses in Anatomy and Physiology, Economic Geology, etc. To the average practitioner, there will come ten questions involving the principles of surveying or engineering to one of constitutional law or English history. Not a day passes in the litigation of the courts but that numerous questions of anatomy, physiology, surveying or engineering arise and are to be decided. Particular attention, therefore, is called to the technical courses offered by the University, which will be open to those in the College of Law who are able to take them without interfering with the required law work. The following departments offer courses which will prove beneficial to those who have not had such training as would enable them to take more technical work: Botany, Physiology, Physics, Civil Engineering, Mine Engineering, Chemistry (Toxicology), Geology, Philosophy, History, English.

EXPENSES

Each student of the University is required to pay an incidental fee of fifteen dollars a year, and in this College a tuition fee of forty-five dollars; a total of thirty dollars for each semester, which is payable at the beginning of each semester.

Good boarding and lodging, convenient to the University, can be obtained at from $3.50 to $5.00 per week.

For information as to the cost of text-books used, address L. T. Williams, Ohio State University, Columbus.

Please send names and addresses of law students, and requests for printed matter, to W. F. Hunter, Dean, 18 Board of Trade, Columbus, Ohio; or to the Executive office, Ohio State University, Columbus.

THE COLLEGE OF PHARMACY

FOR ADMISSION TO THE FOUR-YEAR COURSE[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar,* and *United States History.*

2. *English*—(*a*) Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from a list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work: such as the principles of sentential structure, outlining, paragraphing and choice of words as given in Scott and Denney's Composition-Rhetoric. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed for 1897 and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during his preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics—Questions will be set for the purpose of testing the applicant's knowledge of the subject matter, form and substance of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar:

1899. Chaucer's *The Knight's Tale,* or Dryden's *Palamon and Arcite;* Milton's *Pardise Lost,* Books I and II; Pope's *Iliad,* Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale,* or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost,* Books I and II; Pope's *Iliad,* Books I, VI, XXII, and XXIV; The Sir Richard de Coverley Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro, Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character, to explain words, phrases and figures, to reproduce thought, to point out characteristics of style. Systematic class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works, preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra*—Wentworth's or White's or Wells' Elements, complete.
4. *Botany*—Kellerman's Elementary Botany and Spring Flora or equivalent.
5. *Civil Government*—Fiske or Thorpe preferred.
 Or *History*—Myers's *General History.*
6. *Geometry, Plane and Solid*—Venable, White, Wentworth, or Wells.
7. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first three books of the *De Bello Gallico.*

Or *German*—Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages) Joynes' or Whitney's Reader; Hillern, *Höher als die Kirche;* Riehl's *Der Fluch der Schönheit;* Freytag *Die Verlorene Handschrift; Gerstäcker Irrfahrten.*

For the present, the *German* required for admission may be begun at the University, but without University credits.

8. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.

COURSE IN PHARMACY

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Bachelor of Science in Pharmacy

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Chemistry (7) Inorganic	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	5.
Latin (1) Pharmaceutical. or	5	Latin (1) Pharmaceutical. or	5.	Latin (1) Pharmaceutical or	5.
German (1) Elementary	4.	German (1) Elementary.	4.	German (1) Elementary.	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15) (16) Spherical Trigonometry. Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (1) Paragraph Writing.	2.	Rhetoric (1) Theme Writing.	2.	Rhetoric (1) Prose Analysis.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Botany (6a) Systematic, Physiological.	5.	Botany (4) Medical	2.		
Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.
German (2) Science Reading.	2.	German (2) Science Reading.	2.	German (2) Science Reading.	2.
Pharmacy (6) Gen'l Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensaries, etc.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity and Magnetism	3.	Physics (2) Sound and Light.	3.
				Metallurgy (2) Mineralogy.	3.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

Pharmacy (9) Gen'l Processes.	5.	Pharmacy (10) Prescriptions.	5.	Pharmacy (11) Dispensaries, etc.	5.
Pharmacy (12) Materia Medica.	3.	Pharmacy (13) Materia Medica.	3.	Pharmacy (14) Mat. Medica & Thera.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
		Physiology (8) Bacteriology	2.	Physiology (5) Microscopy.	2.

Chemistry elective for the year—five hours.

FOURTH YEAR

General Chemistry (8) Organic.	5.	General Chemistry (9) Laboratory.	5.	General Chemistry (9) Laboratory.	5.
Geology (2) General.	5.	Geology (2) General.	5.	General Chemistry (11) Toxicology.	4.
Pharmacy (15) Assaying.	5.	Pharmacy (17) General.	5.	Pharmacy (17) General.	5
Thesis.		Thesis		Thesis.	

Elective, three hours through the year.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of special study and research. The subject must be within the field of Pharmacy, and must be announced to the President of the University (dependent upon the written approval of the proper authorities) not later than the beginning of the second term of the fourth year of the Course. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

SHORT COURSE IN PHARMACY

FOR ADMISSION

Candidates for admission who are less than twenty-one years of age must be prepared in the common English branches. Teachers' certificates (in force), or credentials from approved schools, will be accepted in lieu of an examination.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Botany (1) Elementary.	5.
Latin (1) Pharmaceutical.	5.	Latin (1) Pharmaceutical.	5.	Chemistry (12) Qualitative Analysis.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Latin (1) Pharmaceutical.	5.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensaries, etc.	5.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

Botany (6a) Systematic, Phys.	5.	Botany (4) Medical.	2.	Chemistry (11) Toxicology.	4.
Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.
Pharmacy (9) Phar. Chemistry.	5.	Pharmacy (10) Prescription Practice.	5.	Pharmacy (11) Dispensing Practice.	5.
				Physiology (1) Physiology.	3.
Physiology (1) Human Anatomy.	4.	Physiology (1) Physiology.	3.	Physiology (5) Microscopy.	2.
		Physiology (8) Bacteriology.	2.		
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

COLLEGE OF VETERINARY MEDICINE

FOR ADMISSION[1]

The following are the requirements:

I. For applicants for certificate of Veterinary Surgeon: *Arithmetic, Geography,* and *Grammar.*

II. For applicants who intend to become candidates for the degree of Doctor of Veterinary Medicine:

1. *Arithmetic, Grammar, and Descriptive and Physical Geography.*

2. *English Composition and Rhetoric* -Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from a list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises—paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and rewritten by himself.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principals of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in the four types—description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed for 1897 and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during his preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

3. *History*—History of the United States, Johnson preferred.

4. *Latin or German*—One year.

5. *Physics*—Gage, Carhart and Chute, Avery, or Appleton.

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

COURSE IN VETERINARY MEDICINE

NOTE—The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Doctor of Veterinary Medicine

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Ag. Chemistry (1) Principles.	5.	Ag. Chemistry (8) Organic.	5.	Ag Chemistry (9) Applications.	5.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Botany (1) Elementary.	5.
				Physiology (1) Physiology	3.
Physiology (4) Histology.	5.	Physiology (4) Histology.	5.	Physiology (4) Phys. Chemistry.	5.
Veterinary Medicine (11) Osteology.	5.	Vet. Medicine (12) Myology, etc.	5.	Vet. Medicine (13) Dissections, etc.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Stock Breeding.	4.	Agriculture (10) Stock Feeding & Hygiene.	4.
Pharmacy (12) Materia Medica.	5.	Pharmacy (13) Materia Medica.	5.	Pharmacy (18) Laboratory.	5.
Vet. Medicine (14) Gen. athology.	5.	Vet. Medicine (15) Gen. Pathology.	5.	Vet. Medicine (16) Special Pathology.	5.
Vet. Medicine (18) Surgical Diseases.	5.	Vet. Medicine (18) Surgical Diseases.	5.	Vet. Medicine (18) Surgical Diseases.	5.
Vet. Medicine (19) Clinic.	3.	Vet. Medicine (19) Clinic.	3.	Vet. Medicine (19) Clinic.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

THIRD YEAR

Vet Medicine (20) Special Pathology	3.	Vet. Medicine (21) Special Pathology.	3.	Vet. Medicine (22) Therapeutics.	5.
Vet. Medicine (24) Gen. Surgery.	5.	Vet Medicine (25) Practice in Operating.	5.	Vet. Medicine (23) Obstetrics.	5.
Vet. Medicine (19) Clinic.	3.	Vet. Medicine (19) Clinic.	3.	Vet. Medicine (19) Clinic.	3.
Vet. Medicine (27) Meat Inspection.	5.	Physiology (6) Bacteriology.	3.	Vet. Medicine (26) Horse Shoeing.	5.
		Thesis.	2.	Thesis.	2.

THE SUMMER SCHOOL

By action of the Board of Trustees and of the Faculty, a Summer School has been established in the University and placed under the general supervision of the President and Faculty. The immediate supervision of the work of the school is vested in a committee of the Faculty, consisting of the President of the University a Dean of the Summer School, and the heads of departments which offer courses in the Summer School. The session of the Summer School of 1898 began June 20th and closed July 30th, covering a period of six weeks.

Copies of the Summer School Announcement for 1899, containing full information, may be had by addressing the Executive Office after April 1, 1899.

GENERAL STATEMENT

The courses of instruction outlined below were given in the Summer School of 1898. Each course is given if four students apply for it not later than noon of the first Wednesday of the session, unless a larger minimum number of students in the class is specified in the outline of the course. Other courses may be offered if there should be a call for them. Those who desire to engage in special advanced work under the guidance of the University should communicate with the heads of departments concerned.

Each student may select such of these courses as he may wish to take; but the amount of work required in each course is so great that students are advised not to undertake work in more than two departments, nor in excess of fifteen exercises each week. For such excess an extra fee of one dollar for each hour per-week will be charged.

Fees are payable in advance to the Treasurer of the Summer School. Students are admitted to classes only upon presentation of cards signed by the Dean and countersigned by the Treasurer. For three full single courses of five hours each week through six weeks, the fees are fifteen dollars. Many instructors will offer double courses, equal to one course through twelve weeks; and students are encouraged to take one such course, with one single course, and concentrate their work. Students who give their instructors satisfactory evidence that they can profitably carry more work may take a fourth course on the payment of an additional fee of five dollars.

The minimum total fee for any one person is fifteen dollars. No reduction will be made on account of loss of time by students.

Laboratory fees are extra; consult the outline of each course involving laboratory work. The fee for special advanced work is determined by the instructor.

Ten hour classes meet once on Monday and Saturday and twice on other days of the week; six hour classes, on every day of the week; five hour classes, on every day except either Saturday or Monday; four hour classes, on Tuesday, Wednesday, Thursday and Friday; three hour and two hour classes, on alternate days.

During library hours students of the Summer School can consult books in the library and use the reading room for reading and study under the same rules as those which apply to regular University students. There is no library fee.

Each head of department determines what (if any) credits in regular University courses in his department shall be allowed for work done in the summer school. Credit can be allowed only when the work is the same in kind and amount as in the University. For information as to this, and for fuller information respecting any of these courses, apply to the instructors.

The special features for last summer were the Library work, in most competent hands; the special work in Physiological Psychology, and in Child-Study; and the special training in Physical Culture, using the superb new Gymnasium.

The cost of living in Columbus is moderate. A furnished room with board can be secured, in homes conveniently near the University, for not to exceed three and a half dollars a week.

COURSES OF INSTRUCTION[1]

In the following list of courses the number of "hours" indicate the number of class exercises each week, whether lectures, recitations or laboratory work.

BOTANY

A. **Elementary Botany**—Single or double Course. Recitations, lectures, and laboratory work. Kellerman's Elementary Botany will be used as a text, and any one of the Manuals. Herbarium of fifty plants required. Those taking the double course will be required to make an additional herbarium illustrating the various classes of plants 5 or 10 hours

B. **Advanced Botany**—Special work in Systematic Botany, Experimental Physiology, or the Evolution of plants. Lectures and laboratory work. No text book required. Laboratory fee $1.00 for single, $2.00 for double course.....5 or 10 hours

C. **Cytology and Special Methods**—Lectures and laboratory work. Karyolimesis and embryology, with special method of imbedding and staining material for original investigation. No text book required. Laboratory fee $1.00 for single, $2.00 for double course 5 or 10 hours

CHEMISTRY

A. **Principles of Chemistry**—Lectures..... 5 hours

B. **Qualitative Analysis**—Laboratory fee $4.00.....10 hours

C. **Quantitative Analysis**—Laboratory fee $4.00.....10 hours

ENGLISH COMPOSITION, LANGUAGE, RHETORIC

A. **Teachers' Course.**—Lectures, conferences, prescribed readings, and reports on the teaching of composition, grammar and rhetoric in the secondary schools. Some of the subjects discussed will be as follows: Class-room method and procedure; the place of the text-book; plans for courses in the secondary schools; plans for lessons; the essay problem; the teacher's necessary equipment; how much grammar; school grammar against historical grammar; the relations between composition and the study of English Classics; the order of topics; the function of criticism; a review of the work of the Committee of Ten and of the English Conferences; a review of recent text-books. "Hinsdale's Teaching the Language Arts" will be used as a starting point for some of the discussions..... 5 hours

[1] The courses for 1899 have not yet been determined. The courses printed herein are given to illustrate the general scope of the school. They cover the work done in 1898.

B. **Practice Course**—Daily compositions, written for the most part in class, to be criticised closely by the instructor, and including the sketch, the criticism, the book review, the short story, the news article, and the brief and argument, with preliminary lecture on each of these types of composition. Text-book: Scott & Denney's Composition-Rhetoric. This course is equivalent to University course No. 51..... 5 hours

C. **Analysis of Prose**—A study of specimens of English prose with reference to the principles of Rhetoric which they illustrate. Text-book: Genung's Rhetorical Analysis.

ENGLISH LITERATURE

A. **Foundation Studies in English Literature**—A course for teachers consisting of lectures, with illustrative readings. Most of the lectures will deal with the books read and the way in which they should be studied with classes in the secondary schools. A few lectures will be given on the following subjects: The chief aim of the teacher of English Literature; class-room method and procedure; the order in which the prescribed English Classics should be studied; the function of histories of English Literature and of the English and German critics; plans for courses and lessons; a fair division of the time allotted to English..... 5 hours

B. **Teachers' Course in Preparatory Classics**—In this course the classics appointed for the examinstion of 1899 will be studied, beginning with Scott's Ivanhoe. This Course is an enlargement of Course A, and is open only to those who take that course 5 hours

C. **Teachers' Course in Shakespere**—Beginning with the Merchant of Venice..... 5 hours

FRENCH

A. **Elementary Course**—Survey of Grammar; rapid reading; drill in pronunciation. The object of this course is to furnish the beginner with the essentials of the language. Text book: Joyne's Minimum French Grammar and Reader..... 5 hours

B. **Teachers' Course**—An advanced course for teachers and others possessing a reading knowledge of French. The work will include: (1) special training in pronunciation, conversation, dictation and translation from English into French to secure a practical command of the language; (2) lectures on methods of teaching French, and the teacher's equipment..... 5 hours

GEOLOGY

A. **General Inorganic Geology**—Emphasizing especially Geographical and Lithographical Geology. Students will be encouraged to make and label rock collections. Excursions will be made to surrounding points for study of water action and ice action..... 5 hours

B. **Historical Geology**—This course, which is supplementary to Course A, will include lectures and laboratory work, the latter predominating. The lectures will treat of the growth of the North American continent and the development of plant and animal life. The laboratory course will consist of study of typical groups of Ohio fossils..... 5 hours

If desired, a short field excursion of two or three days will be made after the close of regular term.

GERMAN

A. **Outline of German Grammar**—A comparative study of German and English Grammar, designed especially for teachers, and for more mature beginners who are at home in English Grammar. Reading of Gueber's "Märchen und Erzählungen." Double course.....10 hours

B. **Reading of German Pedagogical Works**—This course is based upon the work done in Individual and Scientific Psychology. Some such book as Kéber's "Zur Philosophie der Kindersprache," or Lobisch's "Die Seele des Kindes," will be read. For advanced students only.... 5 hours

C. **German Literature**—An outline course with supplementary reading; for students with one or more year's preparation..... 5 hours

GREEK

A. **Elementary Course**—For beginners. Text-book: Gleason and Atherton's First Greek Book.

B. **Xenophon's Anabasis**—Books I, II or III. Especially adapted for those who need to complete their preparation for college. Industrious and capable students may possibly arrange for a double course in Xenophon.

Work satisfactorily done may be counted towards admission to the University.

Those who wish to enter either class should send their names promptly to Professor J. R. Smith, 950 Madison Avenue, Columbus, Ohio.

HISTORY

A. **American History**—Political History of the Colonies and of the United States. 1750-1820, Hart's "Formation of the Union" used as a basis. Recitations and lectures. Specially designed for teachers..... 5 hours

LATIN

A. **Cicero's Orations**—With special emphasis upon grammatical forms, idiomatic translation, Latin Prose Composition, and Roman History. 5 hours

B. **Vergil's Æneid**—With careful attention to poetic forms, prosody, mythology, Roman life and customs..... 5 hours

If the demand warrants, a second class will be formed to do additional reading in Cicero or Vergil. Work satisfactorily done may be counted towards admission to the University.

All who intend to enter this department should send their names with a statement of the subject desired to Professor F. B. Pearson, 363 West Seventh Avenue, Columbus, Ohio.

MATHEMATICS

A. Courses will be offered in Algebra, Geometry, Trigonometry; also in such higher Mathematics for which there may appear sufficient demand. A special class will be formed for the critical examination of text-books in Mathematics used in the public schools of Ohio.

PHYSICAL TRAINING

A. **Teacher's Course**—Sweedish gymnastics adaptable to public school work..... 5 hours

B. A course of gymnastics progressing from the light free-hand work to elementary apparatus work. Gymnastic and out-of-door games..... 5 hours

PEDAGOGY

A. **Individual and Genetic Psychology**—Lectures, demonstrations and seminaries reviewing the studies of children and of adults with special reference to their relations to educational questions. Laboratory practice in testing the senses, motor ability, etc. A single course..... 5 hours

PHILOSOPHY AND PSYCHOLOGY

A. **Psychology**—Dr. Scott. Text-book, lectures and discussions. For teachers and those intending to teach. A single course, one hour daily; or a double course, two hours daily 5 or 10 hours

B. **Physiological and Experimental Psychology**—Mr. Wissler. Lectures and demonstrations supplemented by laboratory practice. A general course aiming at an exposition of psychological, psychophysical and inductive methods of psychological research. A single course, one hour daily; or a double course, two hours daily. Laboratory fee $1.00.. 5 or 10 hours

PHYSICS

A. **Double Course,** in elementary Physics, either through Kinetics and Heat, or through Electricity, Magnetism, Sound and Light.....10 hours

B. **Single Course,** in laboratory practice; along lines depending on ends in view..... 5 hours

C. **Double Course,** in laboratory, as above..... 10 hours

D. **Special Course,** to make up deficiencies in preparation or record in elementary Physics.

Fees in any single course, $1.00

ZOOLOGY AND ENTOMOLOGY

Vertebrate and Invertebrate Morphology——Classes will be formed to suit applicants—as far as possible.

Other courses will be provided on demand.

SUMMER LIBRARY SCHOOL

This school was under the direction of Dr. G. E. Wire, formerly of Columbia College Library, New York, and lately of the Newberry Library, Chicago.

This school gave a fifteen hour course, one hour being devoted to cataloging, one hour to classification and one hour to other forms of library work. This class work was in the morning, leaving the afternoon for individual and practice work.

Under cataloging was considered, not only author and subject cataloging, but also accessioning, shelf-listing, preparation of books for the shelves and preparation of finding lists and special lists. Classification took up largely the decimal classification, but instruction was offered in the expansive classification.

The miscellaneous heads included book selection and buying, book binding and repair, purchase and care of periodicals, care of pamphlets and clippings, public document, stock-taking, arrangement and care of rooms, shelves, fittings and

supplies, charging systems, stack and open shelves, rules and regulations, reference and reading room work, children's rooms, school work, library legislation, traveling libraries, library associations and periodicals.

To make the course of benefit to as many people as possible, those who intended taking the course specified what they particularly wanted. These preferences were considered, as it is the wish to benefit directly the largest number possible. Aside from the technical work, arrangements were made whereby all interested in library work received advice and instruction in their own peculiar problems. This was planned particularly for library trustees and officers of Women's Clubs, and others who were desirous of some help along their own lines of work.

A portion of each day was devoted to personal work. The Director had a separate hour for this work. In many cases the problems were of so peculiar and of so personal a nature as not to admit of class treatment. The director was accessible including lectures at least eight hours a day.

Fees were $15 for the full course. Special rates for part of the course. Cataloging supplies, such as slips, accession and shelf list sheets were furnished.

THE DEPARTMENTS

The Departments

1898–99

The subjects set forth under each Department limit and define the administrative authority and responsibility of the head of that Department.

AGRICULTURE

Professor Hunt, Associate Professor Gibbs, Assistant Professor Noyes, Mr. Herrick, Mr. Ruhlen.

8.[1] **Breeds of Live Stock.** Lectures and recitations three times a week upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum once a week in scoring and judging live stock. First term.

9. **Principles of Breeding.** Lectures and recitations three times a week upon the laws of heredity and their practical applications. Practicum once a week in scoring and judging live stock, and in writing and tracing pedigrees. Second term.

10. **Stock Feeding and Hygiene.** Lectures and recitations three times a week upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quantity of food to produce given effects. Practicum once a week in calculating digestibilities, nutritive ratios and feeding standards. Third term.

11. **Farm Equipment.** Lectures and recitations three times a week upon selecting planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum once a week in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. First term.

12. **Soils.** Lectures and recitations three times a week upon the origin, formation, kinds, and physical properties of soils, and their improvement by cultivation, fertilization, drainage, and irrigation. Practicum once a week in laboratory testing physical properties of several soils, determining the relation of soils to heat, moisture, air, and fertilizers, and making mechanical analysis. Second term.

13. **Farm Crops.** Lectures and recitations three times a week upon the history, production, marketing, cultivation, and harvesting of farm crops. Practicum once a week with growing and dried specimens of farm crops, including grasses, clovers, and other forage crops. Third term.

14. **Animal Mechanics and Exterior.** Lectures and recitations three times a week upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum once a week in measuring animals and testing the value of given measurements for given purposes. First term.

15. **Butter Making and Cheese Making.** Recitations twice a week. Laboratory practice two half days each week in running separators, churning and working butter, making cheese, and testing and pasteurizing milk. Second term.

(1 These numbers are "finding numbers," and do not necessarily indicate the sequence of topics.

16. **History of Agriculture and Rural Economics.** Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems Four times a week. Third term.
5. **Dairy Farming.** Lectures once a week upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms. Practicum once a week in scoring and judging live stock, writing pedigrees, and calculating feeding standards. Second term.
3. **Butter making and Cheese Making.** Practice in running separators, churning and working butter, etc., making cheese and testing and pasteurizing milk. Four half days each week. Second term.
7. **Butter Making and Cheese making.** Lectures and recitations. Two hours each week. Second term.

AGRICULTURAL CHEMISTRY

Professor Weber and Mr. Vinson

1. **Principles of Chemistry and Chemical Nomenclature.** Lectures and text-book for three or four weeks, five times a week; then lectures twice a week on Chemistry of Non-metals, and laboratory practice three timee a week. First term.
8. **Organic Chemistry.** Lectures twice a week; laboratory practice three times a week. Second term.
9. **Applications of Chemistry to Agriculture.** Lectures twice a week; laboratory three time a week. Third term.
4. **Laboratory.** Analysis of fertilizers, feed-stuffs, dairy products, fruits, vegetables, alchoholic liquors, etc. Five laboratory periods a week through the year.
7. **Chemistry of Milk and Milk Testing.** Twice a week. Dairy Course.
6. **Laboratory,** five times a week through the year.

AMERICAN HISTORY AND POLITICAL SCIENCE

Professor Knight, Associate Professor Siebert, Mr. Rightmire

HISTORY

Course 55 (or 56) must precede all other courses in American History, and those intending to take advanced courses in American History should take Courses 53 and 54 (English History) as early as possible in their course.

For those intending to do advanced work in European History, Courses 51 and 52, in the order named, should precede all other courses in European History, and must precede all except Courses 53 and 54.

FIRST SEMESTER

51. **General History of Europe to the Close of the Middle Ages.** Lectures, text-book and collateral readings. Thatcher and Schwill, *Europe in the Middle Age*. Three times a week. Two sections.
53. **Political and Constitutional History of England to the Accession of the Stuarts.** Lectures, text-book and assigned readings. Gardiner's *Student's History of England*. Three times a week.

55. **Political History of the United States.** Lectures, text-books and prescribed readings. Hart's *Formation of the Union;* Wilson's *Division and Re-Union.* Four times a week. This course is repeated in the Second Semester (as Course 56). Of students who are required to take this subject, those whose names begin with the letters from A to K will take it in the First Semester; others will take it in the Second Semester (as Course 56).

57. **History of Europe from 1789 to 1815.** The French Revolution. Lectures, recitations and collateral reading. Stephen's *Europe, 1789-1815.* Three times a week.

59. **Roman History and Institutions.** Lectures and text-book. Pelham, *History of Rome.* Twice a week.

61. **Pro-Seminary for Research Work in American History and Political Science.** Two hours a week (at one meeting).

All students who elect their Major Study in the department of American History and Political Science must take this course in the fourth year. Open, as elective, to other students, graduate and advanced undergraduate, on permission of the instructor.

63. **American Colonial History.** Lectures and quizzes upon lectures and assigned reading. Three times a week.
Given biennially. Not offered in 1898-99.

65. **Constitutional and Political History of the United States, 1850-1876.** Secession, Civil War and Reconstruction. Lectures and assigned readings. Three times a week.
Given biennially. Not offered in 1899-1900.

SECOND SEMESTER

52. **General History of Europe from the close of the Middle Ages to the French Revolution.** Lectures text-book and collateral reading. Duruy's *Modern History.* Three times a week. Two sections.

54. **Political and Constitutional History of England from the Accession of the Stuarts to the present time.** Lectures, text-book and assigned readings. Gardiner's *Student's History of England.* Three times a week.

56. **Political History of the United States.** Lectures, text-books and prescribed reading. Hart's *Formation of the Union;* Wilson's *Division and Re-union.* Four times a week. [This is a repetition of Course 55 and will be taken in the Second Semester by those students (of whom it is required) whose names begin with letters from L to Z.]

58. **History of Europe since 1815.** Lectures, text-book and assigned reading. Fyffe's *Modern Europe.* Three times a week.

60. **History of the Period of the Protestant Reformation.** Lectures and text-book. Hausser's *Era of the Reformation.* Twice a week.

62. **Pro-seminary for Research Work in American History and Political Science.** Two hours a week (at one meeting).

This is a continuation of Course 61, and is open only to those who have had Course 61. All students who elect their Major Study in the department of American

History and Political Science must take this course in the fourth year. Open, as elective to other students, graduate and advanced undergraduate, on permission of the instructor.

64. **Constitutional and Political History of the United States.** The Formative Period, 1776–1815. An advanced course. Lectures and assigned readings and investigations. Three times a week.
Given biennially. Not offered in 1898-99.

66. **Teacher's Course in United States History.** Two hours.
Open only to students in the fourth year who have had at least one course in Pedagogy. Will not be given unless elected by at least ten students.

68. **American Diplomatic History.** History of the foreign relations, policy and treaties of the United States. Lectures and special investigations. Three times a week.
Given biennially. Not offered in 1899-1900.

POLITICAL SCIENCE

FIRST SEMESTER

5 1. **International Law.** Lectures and text-book. A study of public international law and of the important modern treaties. Lawrence's *Principles of International Law.* Twice a week. Open only to those who have had Courses 51, 52 and 55 (or 56) in History.
Given biennially. Not offered in 1898-99.

53. **Political Institutions of the United States.** Lectures and recitations. A study of the origin and nature of the political institutions of the United States, and an analysis of the form and powers of the government. Bryce's *American Commonwealth;* Burgess's *Political Science.* Three times a week. Open only to students who have had History 55 or 56.

SECOND SEMESTER

52. **Municipal Government.** Lectures and collateral reading. A study of the development and status of modern municipalities, and a comparative study of recent American municipal charters. Twice a week.

54. **Comparative Political Institutions of Europe and America.** Lectures, recitations and collateral readings. A comparative study of the political institutions and governmental forms and powers in the United States, England, Germany, France and Switzerland. Burgess's *Political Science and Constitutional Law.* Three times a week. Course 54 must be preceded by Course 53.

Courses 5 and 6 in History in the College of Agriculture and Domestic Science are the same as Courses 55 and 56 in History described above.

ANATOMY AND PHYSIOLOGY

Professor Bleile, Assistant Professor Van Harlingen, Mr. Dresbach

COLLEGES OF AGRICULTURE, PHARMACY, AND VETERINARY MEDICINE

1. **Human Anatomy and Physiology.** Lectures, recitations and laboratory work Three times a week. First, second and third terms.
This course must be preceded by, or accompanied with, a course in chemistry.

2. **General Physiology.** Lectures, recitations and demonstrations. Three times a week. Third term. [Short Course in Agriculture.]

3. **Chemical Physiology.** Five times a week. Third term. [Domestic Economy Course.]

4. **Histology and Histo-Chemistry.** Five times a week through the year. This course must be preceded by, or accompanied with, a course in chemisty.

5. **Microscopy and Urinary Analysis.** Lectures and laboratory work. Twice a week. Third term.

6. **Bacteria,** in their relation to Milk, Butter and Cheese. Lectures and laboratory work. Twice a week. Second term.

7. **Bacteriology.** Three times a week. Second term. [Veterinary Medicine.]

8. **Bacteriology.** One lecture, one laboratory period, a week. Second term. [Pharmacy.]

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51[1]. **Human Anatomy and Physiology.** Lectures, recitations and laboratory work. Three times a week.

53. **Physiological Laboratory.** Three laboratory periods a week.

55. **Physiological Laboratory.** Five laboratory periods a week.

57. **Bacteriology.** One lecture, one laboratory period a week.

59. **Histology and Histo-Chemistry.** Laboratory. Five laboratory periods a week.

61. **Bacteriology.** One lecture, two laboratory periods a week.

Second Semester

52. Continuation of Course 51. Three times a week.

54. Continuation of Course 53. Three laboratory periods a week.

56. Continuation of Course 55. Five laboratory periods a week.

58. **Microscopy.** Lectures and laboratory work. Twice a week. Last half of Semester.

60. Continuation of Course 59. Five laboratory periods a week.

ANCIENT ART

(*See* Greek Language and Literature.)

ARCHITECTURE

(*See* Drawing.)

ASTRONOMY

Associate Professor H. C. Lord, Mr. Maag

COLLEGE OF ENGINEERING

2. **Astronomy and Geodesy.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Four times a week. Third and first terms.

[1] "Finding numbers" from 51 upwards always indicate Semester work.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

52. **General Astronomy.** Lectures and recitations. Five times a week. Second half, second semester.

54. **Mathematical Astronomy.** Five times a week. Second semester. Consult Professor Lord.

55, 56. **Theoretical Astronomy.** Lectures and Observatory practice. The theory of the undisturbed motion of a planet or comet and the calculation of ephemerides. Parabolic orbits from three complete observations. Orbits from three complete observations, including the eccentricity. Work in the Observatory with the twelve-inch equatorial. Definitive orbits. Observatory work continued. Authorities: Watson, Klinkerfeus, Appolzer and the astronomical journals. Five times a week through the year.

57, 58. **Astro-Physics.** Lectures on the theory of the Spectroscope and its use in Astronomy, supplemented by practice with the large spectroscope of the Observatory. Five times a week through the year.
Astronomy 55, 56, 57 and 58 are open only to students who have had Calculus.

BOTANY

Professor Kellerman, Mr. Schaffner

COLLEGES OF AGRICULTURE, PHARMACY AND VETERINARY MEDICINE

1. **Elementary Botany.** Lectures, recitations and field work. Text book: Kellerman's *Elementary Botany* and *Spring Flora* Must precede all other courses in this department except course 9. Five times a week. Third term.

4. **Medical Botany.** Twice a week, second term. Similar to course 56 in the College of Arts, Philosophy and Science. Reference book: Maisch's *Organic Materia Medica.*

6. **Physiological Botany.** Lectures, recitations and laboratory work. Barnes' *Plant Life.* Five times a week. First term.

6*a*. **Systematic and Physiological Botany.** Lectures, recitations and laboratory work. Barnes' *Plant Life.* Five times a week. First term.

7. **Physiological and Economic Bontany.** Lectures, recitations and laboratory work. Barnes' *Plant Life.* Five times a week. Second term.

8. **Vegetable Pathology.** Lectures, recitations and laboratory work. Five times a week. Third term.

9. **Dendrology.** Lectures, field and laboratory work. Twice a week, first term. Open to students who have not studied Botany.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. Similar to Course 1 in college of Agriculture.
53. Similar to Course 6*a* in the College of Agriculture. Four times a week.
55. **Systematic and Physiological Botany.** Lectures, recitations, laboratory and field work. Barnes' *Plant Life.* Four times a week.
57. **Laboratory work.** Fungi, Algae, Bryophyta. Two or three time a week.
59. **Advanced Laboratory Work in Histology and Physiology.** Five times a week. Open studentswho have taken Course 53 or 55.

61. **Systematic Botany, Phenogamic and Cryptogamic.** Three to five times a week. Open to students who have taken Course 53 or 55.

63. **Monographic Work.** Graduate Course. Credit five or ten hours.

65. **Research Work in Morphology and Physiology.** Graduate Course. Credit five or ten hours.

SECOND SEMESTER

56. **Medical Botany.** Laboratory work. Maisch's *Organic Materia Medica.* Twice a week. First half of semester. This course must be preceded by course 53.

58. Continuation of Course 57. Pteridophyta, Gymnospermae, Angiospermae. Two or three times a week.

60. Continuation of Course 59. Five times a week.

62. Continuation of Course 61. Three to five times a week.

64. Continuation of Course 63. Credit five or ten hours.

66. Continuation of Course 65. Credit five or ten hours.

CHEMISTRY

Professor McPherson, Professor Norton, Assistant Professor Foulk, Mr. Fisher Mr. Clements

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Elementary Chemistry.** Arranged for students who have little or no knowledge of Chemistry. Three sub-divisions; one lecture, one quiz, and three hour's laboratory practice weekly. In the laboratory the student performs an extended series of experiments illustrating the principles of Chemistry. Three hours credit.

53. **Qualitative Analysis.** Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to analysis of unknown substances. Three to five times a week. This course must be preceded by courses 51 and 52.

55. **Quantitative Analysis.** Laboratory, lectures and recitations. Use of the balance and general principles of gravimetric analysis. Drill in the solution of problems in quantitative analysis; study of properties of precipitates; principles of volumetric analysis. Selections are made from such analytical methods as best meet the needs of the students. The samples used for analysis are mixtures or commercial products the percentage composition of which is not made known to the student until he has reported his own results. Five times a week.

57. **Organic Chemistry.** Laboratory, lectures and recitations. Open only to students who are fmiliar with at least the principles of quantitative analysis. Five times a week.

59. **Advanced Chemisty.** Laboratory. Arranged for special students who have had courses 53, 54, 55, 56, 57; also course 58 for students in Organic Chemistry. Students are allowed to select such work as they are capable of undertaking—as, the critical examination of analytical methods as well as the study of new methods. Five times a week.

61*a*. **Inorganic Preparation.** Laboratory. This course includes the preparation of inorganic substances from the crude materials. Special attention is given to the preparation of chemically pure compounds, to be used in certain quantitative processes. Thorpe's text book on Inorganic Preparations is used, and reference is made to Bender and Erdmans' *Anorganische Praparate* and Krauche's *Prufung Chemischer Reagienlien.* This course must be preceded by quantitative analysis. Four times a week until the Christmas Recess.

Students electing this course must follow with theoretical chemistry and sanitary analysis.

61*b*. **Theoretical Chemistry.** Lectures and recitations. A course of twelve weeks beginning after the Christmas Recess. Four times a week.

63. **Chemical Seminary.** Special students will meet to discuss special topics and reviews of current literature. Once a week.

65. **Electrolytic Analysis.** Laboratory. Extended practice is given in quantitative electrolytic analysis. Twice a week. (Not given in 1897–1898.)

SECOND SEMESTER

52. Continuation of Course 51. Three hours' credit.

54. Continuation of Course 53, including use of Spectroscope.

56. **Quantitative Analysis.** Continuation of Course 55. Five times a week.

58. **Organic Chemistry.** Laboratory. Continuation of Course 57. Arranged for students who wish to specialize in organic chemistry. The course includes further preparation of typical organic compounds; organic combustions and the determination of vapor densities. Five times a week.

60. Continuation of Course 59.

64. Continuation of Course 63.

66. Repetition of Course 55.

68. **Sanitary Analysis.** Laboratory and Lectures. A study of the most important chemical methods for the analysis of water and air. This course must be preceded by quantitative analysis, and at least the equivalent of Course 61 in Anatomy and Physiology (bacteriology.) The course extends over the last ten weeks of the second semester.

Students who can elect but one year of Analytical Chemistry, will take Course 53 and 66. Others will take 53 and 54, then follow with 55, 56 and 57.

COLLEGES OF ENGINEERING AND PHARMACY

7. **Elementary Chemistry.** Inorganic. Lecture, Laboratory and Quiz. Laboratory work; First Term, experiments upon the non-metals; Second Term, principles of qualitative analysis. Five times a week. First and Second Terms. (All four-year Engineering Courses, and long and short Courses Ceramics, Mine Engineering and Pharmacy.)

12. **Qualitative Analysis.** Five times a week. Third term.

13. **Qualitative Analysis.** Three laboratory periods a week. Second term. (Short Course in Mine Engineering.)

4. Similar to Courses 55 and 56. Five times a week through the year.

8. **Organic Chemistry.** Lectures. Five times a week. First term.

9. **Organic Chemistry.** Laboratory. Similar to Course 58. Five times a week. Second and third terms.

11. **Toxicology.** Lectures. Poisons—their effects, antidotes and detection. Four times a week. Third term.

14. **Theoretical Chemistry.** Lectures and Recitations. Three times a week. Second term.

15. **Sanitary Analysis.** Similar to Course 68. Four times a week. Third term.

16. **Applied Chemistry.** Lectures on Industrial Chemistry. These are made as practical as possible by visits to different chemical works. When possible specialists deliver lectures on subjects belonging to their particular line of work. Three times a week. Second term. (This Course not given in 97-98.)

7. **Inorganic Preparations.** Similar to Course 61. Four times a week. First term.

For Courses in the technical analysis of iron, steel and allied products, see the department of Mining and Metallurgy.

For Courses dealing with the application of Chemistry to Agriculture, see the department of Agricultural Chemistry.

CIVIL ENGINEERING

Professor Brown, Assistant Professor Sherman

1. **Land Surveying.** Recitations and field work. Johnson's Theory and Practice of Surveying. Six times a week. First term. Second year.

2. **Railroad Surveying.** Recitations and field work. Searle's Field Engineering. Six times a week. Third term. Second year.

3. **Topographical Surveying.** Lectures, field work and drawing. Johnson's Surveying used for reference. Four times a week. First term. Third year.

4. **Topography.** Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four times a week. Second term. Second year.

5. **Working Drawings in Railway Construction.** Lectures and drawing and estimates of simple structures. Three times a week. Second term. Third year.

6. **Stereotomy.** Recitations, drawing and model cutting. Warner's Stereotomy Four times a week. Second term. Third year.

7. **Bridge Strains.** Recitations and lectures. Part I of Dubois's Strains in Framed Structures. Five times a week. Third term. Third year.

8. **Bridge Designing.** Lectures and drawing. Part II of Dubois's Strains in Framed Structures and Johnson's Modern Framed Structures used for reference. Five times a week. First term. Fourth year.

10. **Sanitary Engineering.** Lectures. Five times a week. Third term. Fourth year.

14. **Civil Engineering Laboratory.** Cement testing, adjustment of instruments Twice a week. Second term. Fourth year.

15. **Masonry Construction.** Recitations and lectures. Baker's Masonry Construction. Five times a week. First term. Fourth year.

16. **Highways.** Lectures on roads, streets, canals, railroads and rivers. Five times a week. Second term.
Fourth year students in Civil Engineering must elect either 16 or 17.

17. **Railway Location.** Recitations and lectures. Wellington's Economic Theory of Railway Location. Five times a week. Second term.
Fourth year students must elect either 16 or 17.

18. **Water Supply.** Recitations and lectures. Fanning's Water Supply. Five times a week. Third term. Fourth year.

19. **Trusses.** Lectures and drawing. Five times a week. Third term.
Third year, Mine Engineering and Mechanical Engineering.

20. **Roof Trusses.** Lectures and drawing. Five times a week. First term.
Third year, Architecture.

21. **Surveying.** Recitations and field work. Davies' Surveying. Three times a week. Third term.
Third year, Architecture.

CLAY WORKING AND CERAMICS

Professor Edward Orton, Jr., Mr. Bleininger

1. **Quantitative Analysis of Simple Minerals.** This course is open only to those who have completed General Chemistry 12. This student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy minerals. Five times a week. First term.

2. Continuation of Course 1. The student begins the quantitative analysis of clays and complex minerals, working first on samples of known composition, and later on unknown materials. Five times a week. Second term.

3. Continuation of Course 2. The student completes the ultimate analysis of clays, and begins the proximate or "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five times a week. Third term.

4. **A series of lectures** (supplemented by frequent recitations) on the origin, composition and properties of clays and other minerals employed in the clay, glass, and cement industries. Five times a week. First term. Laboratory work in the physical testing of clays, and in their mechanical analysis.

5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of bricks and the coarser clay wares, including the selection and winning of the materials, their preparation, manufacture, burning and testing. Five times a week. Second term.

6. Continuation of Course 5. A series of lectures, with recitations on the classification and manufacture of pottery and the finer grades of clay wares, including the selection of the materials, preparation of the bodies, manufacture of the ware, preparation of the glazes, burning and decoration of the wares, and the pyrometry of ceramics. Five times a week. Third term.

7. Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five times a week. Second term.

8. Continuation of Course 7. The further analysis of colored glasses and glazes, enamels, and ceramic colors, especial attention being given to the determination of the coloring and opacifying oxides. Five times a week. Third term.

9. **Laboratory work in Ceramics.** Open only to those who have completed Courses 3 and 6. The student will first undertake the production of such wares as are made from single clays, such as bricks for building and paving purposes; then those wares whose bodies are made by blending two or more natural clays, such as firebrick and refractory materials, earthenwares, stonewares, and yellow wares; and lastly, such wares as are made by the building up of an artificial body, such as is used in the production of white wares, porcelain, and in glazed and encaustic tiles. In each case the bodies made will be made into appropriate wares, burnt, and tested as to quality. Five times a week. First term.

10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes," and taking successively the soft raw-lead glazes, the fritted lead-boracic-acid glazes, and the hard-fire leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit" it accurately. Five times a week. Second term.

11. Continuation of course 10. The student will practice on the use of the coloring and opacifying oxides on glazes, and on the production of vitrifiable colors for the underglaze and overglaze decoration of pottery, and in the production of body-stains for encaustic wares. Five times a week. Third term.

12. A series of lectures on the manufacturing and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Facilities for laboratory work in making, burning, and testing cements will be given. Five times a week. Second term.

13. Practice in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns, and burning cylinders. Students will be allowed to specialize along the lines they intend to follow. Twice a week. Second term.

14. **Mineral Reports.** A series of lectures and recitations, with frequent quizzes on the prospecting and opening up of mineral properties, and in the inspection of factories and ceramic plants, with a view to recommending economic changes in them. Frequent trips will be made to the important clay-working centers of Ohio for field-work and practice in observation. Students will be allowed to specialize along their intended lines. Five times a week. Third term.

15. **Thesis.** A satisfactory thesis, involving original investigation and special study must be completed as a requisite for graduation. The subjects for these must lie inside the range of ceramic work, but can be made to follow the lines along which the student has been specializing.

DOMESTIC ECONOMY

Associate Professor Bowman, Mrs. James

1. One lecture (demonstrated when necessary) and three laboratory periods a week. Four hours credit. First term.

 Lectures on

 (a) **Principles of Combustion,** utility and costs of fuels, construction of ordinary stoves and ranges and of the Aladdin Oven; practice in building, regulating and caring for a fire; the consideration of ancient and modern methods of cooking.

 (b) **Food Economics:**

 Study and classification of Food principles: Water, Salts, Carbo-hydrates, Proteids, Fats

 Comparative nutritive values of foods. A vegetable diet considered. Baking powders, food adjuncts, beverages, filtration, laws regulating adulteration of foods and inspection of meats, the various methods of preserving foods.

 (c) **Study of Cuts of Meats** (demonstrated) and of carving.

 Laboratory work.

 General Cookery. Preparation of cereals, vegetables, soups, stews, fish meats and breads.

2. One lecture, three laboratory periods a week. Four hours credit. Second term.

 Lectures on

 (a) **General Marketing.**

 (b) **Comparative Nutritive Values,** and money values, of various foods. Study of charts and dietetic tables, preparation of dieteries.

 (c) **The Chemistry of the Human Body.** (1) Its composition. (2) The Chemistry of Digestion.

 (d) **The Effect of Cooking** upon the digestibility of foods. Necessity for a mixed diet.

 (e) **Waiting-maids Course** (4 weeks).

 Laboratory work.

 (a) **General Cookery.** Preparation of entrees, croquettes, salads, pastry, puddings and sauces.

3. One lecture and three laboratory periods a week. Four hours credit. Third term.

 Lectures on

 First Aids to the Injured, and on general nursing.

 Laboratory work.

 (a) **General Cookery.** Four weeks. Including cakes, desserts, frozen dishes, etc.; and the ordering, preparation and serving of a dinner to guests.

 (b) **Invalid Cookery.** Six weeks. Including the preparation of such dishes as may be healthful and appetizing during illness or convalescence.

4. One lecture, three laboratory periods a week. Four hours credit. First term.

 Lectures on

 Household Economics:

 (a) The situation of a house, the planning and construction of a house from attic to cellar; light, heat, ventilation, water supply, plumbing, sewerage, disinfection.

(b) The ordering of house-work.
(c) Simple household accounts and bookkeeping.
(d) Laundry work.

Laboratory work.

(a) Canning, jellying, preserving, pickling, etc. Four weeks.
(b) Chafing dish. Three weeks.
(c) Laundry work. Five weeks. Washing, ironing, and general care of underclothing (silk, flannel and merino), linens, starched clothes, laces and embroideries.

5. One lecture, with two practice periods in sewing and one in millinery a week. Four hours credit. Second term.

Lectures on

Production and Manufacture of Cotton, wool, flax, silk, etc.; the choice and treatment of various materials; study of line, form, color and texture as applied to dressmaking and millinery. Artistic and hygienic dress considered.

Practice work

(a) **Plain Sewing.** Practice in the different stitches, drafting and making white goods by hand and by machine.
(b) **Millinery.** Making bows, facing and finishing brims, trimming simple hats.

6. One lecture, with two practice periods in sewing and one in millinery a week. Four hours credit. Third term.

Lectures on

Historic Costumes illustrated.

Practice work.

(a) **Sewing.** Drafting and making an unlined dress. Drafting and making a cloth skirt. Drafting, matching and making a striped house-jacket.
(b) **Millinery.** Making and trimming covered hats and bonnets, making a shirred hat.

7. One lecture with two practice periods in sewing and one in millinery a week. Four hours credit. First term.

Lectures on

Art and its Applications.

Practice work.

(a) **Sewing.** Drafting and fitting waist linings. Drafting and making close fitting waist. Drafting and making princess gown.
(b) **Millinery.** Designing and making an evening hat or bonnet. Work with fancy straws and mourning goods.

8. One lecture with two practice periods in dressmaking and one in art needle work weekly. Four hours credit. Second term.

Lectures on

History of Domestic Art.

Practice work.

(a) **Dressmaking.** Designing, drafting, fitting and making an evening gown and fancy waist.
(b) **Art Needlework.** Drawn work, lace work and simple embroidery.

One lecture, with three practice periods in tailoring weekly. Four hours credit. Third term.

Lectures on

Art in the Household.

Practice work

Designing, Drafting and making of a tailor suit and lined jacket

DRAWING

Associate Professor Bradford, Assistant Professor French, Mr. Lewis

1. **Freehand Drawing.** Practice and occasional lectures. Pencil, charcoal, pen and water-color drawing from copies, models and plaster casts.
 One drawing period a week, three terms, Industrial Arts.
 Two drawing periods a week, first term, Short Mining and Domestic Economy.
 Two drawing periods a week, first and second terms; all four-year Engineering Courses.
 Three drawing periods a week, three terms, Architecture.

2. **Lettering.** Practice and occasional Lectures.
 Two drawing periods a week, third term, Industrial Arts, and Short Mining.
 Three drawing periods a week, third term, Ceramics, Civil, Electrical, Mechanical and Mine Engineering, and Architecture.
 This Course must be preceded by Course 1.

3. **Mechanical Drawing.** Lectures or recitations, one period a week. Practice two periods a week. All Engineering, Industrial Arts, Architecture. Subjects: Orthographic, Isometric and Oblique Projection and elementary Working Drawings. First term.
 Lectures or recitations two periods a week. Practice one period a week, in Industrial Arts and in all Engineering Courses except Civil Engineering; three periods a week in Civil Engineering and Architecture. Subject: Descriptive Geometry. Second term.
 Lectures or recitations, one period a week. Practice, two periods a week in Engineering Courses; four periods a week in Architecture. Subject: Shades, Shadows and Perspective. Third term, in all four-year Engineering and Industrial Arts Courses and the Course in Architecture. First term in the Short Mining and Domestic Science Courses.
 This Course must be preceded by Course 2.

4. **Draughting and Blue-printing.** Practice and occasional Lectures. Three periods a week, second term. Arranged especially for the students in the Short Mining Course. This Course must be preceded by the first term of Course (3).

5. **Technical Drawing.** Lectures and Practice. Rules and methods for working drawings, tracing, blue-printing, machine design and practice in making same to represent form and dimensions for shop use. Three periods a week First term, Mechanical and Electrical Engineering Courses. This Course must be preceded by Courses (2) and (3).

7. **Photography.** Lectures and Practice. Lectures: Optics of Photography, chemistry of photography, exposing and developing, printing, lantern slides, orthrochromatic photography and some of the applications of photography. Practice in outdoor, interior, instantaneous and flash-light photography, copying, lantern slides, and printing. Two periods a week. Ceramics, Architecture, first term. Civil, Mechanical and Mine Engineering, third term. The first term of this Course is elective.

8. **Mechanical Drawing.** Lectures and Practice. Geometric and Projection Drawing. Two periods a week, first and second terms, Industrial Arts.

10. **Mechanical Drawing.** Lectures and Practice. Arranged especially for the students in Agriculture and Horticulture. Two periods a week, first term

11. **Mechanical Drawing.** Lectures and Practice. Arranged especially for the students in Short Course in Ceramics, five periods a week, third term.

12. **Clay Modeling.** Modeling in Clay and Casting in Plaster, ornamental forms from designs, photographs, nature and original designs. Two periods a week; first, second and third terms.
This Course must be preceded by Course 1.
Domestic Economy Course, second term. Architectural Course, second and third terms. This Course must be preceded by Course (1).

13. **Technical and Decorative Design.** Lectures and Practice. Lectures on the principles of decorative design in monochrome, color and relief, and practice in the same. Two periods a week; first, second and third terms.

14. **Pen drawing.** Two periods a week, first term. Arranged especialy for the Course in Architecture. This Course must be preceded by Course (1).

15. **Technical Drawing.** Lectures and Practice. House Designing. Five periods a week, third term. Domestic Economy.

ARCHITECTURE

1. **Orders of Architecture.** Detail Drawing of the Orders, to accompany the study of Ancient Art. One lecture, and four practice periods a week, second term.

2. **Styles of Architecture.** Lectures and drawing of Architectural Details representing the characteristic styles in Architecture. One lecture, and four practice periods a week, third term.

3. **Designing.** Lectures and Designing of Architectural structures adapted to modern requirements. Five periods a week; first, second and third terms.

4. **Specifications.** Lectures and Practice in preparing specifications for Architectural Structures. Two periods a week, first term.

5. **Decoration and Ornament.** Lectures. The practice part of this Course will be incorporated in Courses (3) and (8). Three periods a week, second term.

6. **Estimates.** Lectures and Practice in preparing estimates for structure designed in Courses (3) and (8). Four periods a week, third term. The duties of a superintendent will be considered in this Course.

7. **Heating and Ventilating.** Lectures. The practical applications of this Course will be incorporated in Courses (3) and (8). Five periods a week, second term.

8. **Designing.** Lecture and Practice. Designing of buildings requiring steel and fire-proof construction. Five periods a week, third term.

ECONOMICS AND SOCIOLOGY

Associate Professor Clark

Course 51 or Course 52 must precede all other Courses.

FIRST SEMESTER

51. **Elements of Political Economy.** A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages etc. Text-book, lectures and individual investigations. Two Sections. Four times a week. This Course is repeated in the Second Semester (as Course 52). Of students who are required to take the subject, those whose names begin with the letters L to Z will take it in the First Semester; others will take it in the Second Semester (as Course 52)

53. **The History of Industrial Society.** A general view of the evolution of industrial society; and a study of causes and effects of past economic policies together with their bearing on existing conditions; with special reference to England and America. Lectures and assigned readings. Twice a week. *Not offered in 1898–99.*

55. **Practical Problems in Economics.** A rapid study of immigration, money railroads, crises and tariff. Lectures and collateral readings. Twice a week.

57. **The Transportation Problem.** A study of the development and present economic status of canals and railroads in their relation to industry and to the state. Lectures. Twice a week.

59. **Public Finance and Taxation.** This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Municipal indebtedness and corporate financiering are incidentally treated. Text book and lectures. Twice a week.
Not offered in 1898-99.

61. **Seminary in Economics.** Two hours a week at one meeting. All students who elect their Major Study in Economics must take this course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

63. **Sociology and Statistics.** Lectures and laboratory work. One hour credit. This course may accompany courses 55, 57, 59 or 65.

65. **Commercial Geography.** A scientific study of business relations and conditions, domestic and foreign; the sources, quantity and quality of products, and the distribution of the same; laws of markets, competition and of trade; methods of doing business in foreign countries; prices, tariffs, exchange, means of communication etc. The Consular Reports will constitute one, basis of study. Texts and lectures. Twice a week. May be expected in 1899-00.

SECOND SEMESTER

52. **Elements of Political Economy.** Text-book, lectures and individual investigations. Two sections. Four times a week. (This is a repetition of Course 51, and will be taken in the Second Semester by those students (of whom it is required) whose names begin with the letters from A to K.)

54. **The History and Theory of Socialism.** Lectures and collateral readings. Twice a week.
Not offered in 1898-99.

56. **Industrial and Social Reforms.** A study of labor problems, charities and corrections, monopolies, insurance, savings associations, etc. Lectures and collateral readings. Twice a week.

58. **Money, Credit and Banking.** This course involves the history and theory of the subject; a comparative study of monetary systems, currency, business paper, etc.; together with the methods of banking; national banks, clearing houses, sub-treasury, etc.; and a critical analysis of proposals for reform. Texts, lectures and collateral reading. Twice a week.

60. **Industrial and Financial History of the United States.** A complete survey of American industries, financial resources and policies; public lands, government subsidies, internal revenue, etc.; history and description of the Treasury and Interior Departments, the Mints, etc. Lectures and collateral readings. Twice a week.
Not offered in 1898–99.

62. **Seminary in Economics.** Two hours a week at one meeting. This is a continuation of Course 61, and is open only to those who have had that course. All students who elect their Major Study in Economics must take this Course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

64. **Sociology and Statistics.** A continuation of Course 63. One hour credit. May be taken separately or accompany Courses 56, 58 or 60.

Courses 1 and 2 in the College of Agriculture and Domestic Science are the same as Courses 51 and 52 described above.

EDUCATION

Professor Gordy, Mr. Wissler

FIRST SEMESTER

51. **Elementary Educational Psychology.** This course is intended to be helpful to three classes of students: (1) Those who are not preparing to teach, but who wish to make some study of education in order that they may perform their duties as members of society more intelligently: (2) Those intending to teach and who wish to study the relations between Psychology and education; and (3) Those preparing to be superintendents and who wish to get suggestions as to the best method of teaching Psychology to teachers. The text used is Gordy's *Psychology*. Students will be required to do collateral reading and bring in reports of their work. Four hours a week.

53. **History of Greek Education.** Students of this course will make a study of the history of the education of the Greeks from the time when life was their only school to the time when Greece became the teacher of the world. The connection between Greek life and Greek education will be sharply emphasized; the defects of Greek ideals of life will be shown as reappearing in Greek ideals and methods of education, and these in turn as exerting an influence on Greek life. This course will be essentially a study of Greek civilization, but with the practical purpose of getting light for the solution of our own problems. It is believed that the course will be especially helpful to those preparing to teach history, and the classics. The texts used are Davidson's *Greek Education*, and Davidson's *Aristotle*. Readings are required of students in Greek history and Plato's *Dialogues*. Four hours a week.

55. **The Herbartian Pedagogy.** The object of this course is three-fold: (1) To ascertain what the Herbartian Pedagogy is; (2) To determine its truth, and (3) To consider carefully its applicability -so far as it is true-- to the schools of this country. Special attention will be given to these Herbartian theories that are most widely current in this country. The texts used are Herbart's *Science of Education*, De Garmo's *Herbart* and Lange's *Apperception*. Four hours a week.

57. **The History of Education in the United States.** The object of the course will be not merely to follow the course of the history of education in this country but to study our educational practice in the light of true educational ideals. Each member of the class will be expected to make a special study during the year of the system of education of some state or city and repeat the results of his study to the class. Two hours a week.

59. **Child Study.** A course in individual and genetic psychology reviewing the studies of children and adults with special reference to their relation to educational questions. Later in the year. Seminary work; a study of some one central topic by all students of the course together with a special investigation by each member of the class. Two hours a week.

SECOND SEMESTER

52. **Modern Educational Theories.** These theories will be studied from three points of view; (1) As the expression of a certain philosophy of life; (2) From the point of view of this consistency; and (3) from that of their truth. The text is Quick's *Educational Reformers.* Four hours a week.

54. **Plato's Republic.** This course is essentially Seminary work for the benefit of those students of course 53 who wish to make a close and critical study of Plato's *Phylosophy of Government and Education.*

56. **The Kindergarten.** This course is intended especially for those who are preparing to do kindergarten and primary work, and for those who are preparing to be superintendents of schools. The texts used are Bowen's *Froebel* and Miss Blow's *Symbolic Education.* Two hours a week.

58. **The Philosophy of Education.** This course aims to make a systematic exposition of the philosophy of education. It is intended to be of benefit to all those who wish to know the ideals which education should seek to realize, and the means which should be employed in their realization. The text is Laurie's *Institute of Education.* Four hours a week.

60. **The History of Education in the United States.** This course is a continuation of 57. Two hours a week.

62. **Problems in Supervision.** This course aims to give special attention to the questions with which superintendents have to deal—questions of promotion, school organization, school government and the like. Two hours a week.

64. **Educational Value.** This course seeks to determine the capacity of the various subjects studied in elementary and secondary education to contribute to true educational ideals. The text is *Fouillee's Education* from a National standpoint. Two hours a week.

66. **Child Study.** A continuation of 65. Two hours a week.

ELECTRICAL ENGINEERING

Associate Professor Caldwell, Mr. Fish

2. **Electrical Engineering.** Lectures, Recitations and Problems. Theory of dynamo-electric machinery, including direct current and alternating current generators and motors; methods of regulation and control; circuits, lamps and auxiliary apparatus; storage batteries; applications of electricity to street car and mine working; design, construction, and management of plant. Five times a week. First, second and third terms.

3. **Electrical Designing.** Including D. C. and A. C. generators and motors, transformers, distribution, etc. Three times a week, through the year.

4. **Electrical Laboratory.** A full experimental course in the handling and testing of generators, motors, storage batteries, circuits, etc. Three half days a week. First, second and third terms.

6. **Electrical Engineering.** Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and applications. Twice a week. (First and second terms of fourth year of Civil, Mining and Mechanical Engineering Courses.)

7. **Electrical Engineering.** Laboratory work on the subjects treated in Course 6, which it accompanies. Twice a week. (First and second terms of fourth year in Civil, Mining and Mechanical Engineering Courses.)

ELOCUTION AND ORATORY

Professor Fulton

The work in this department is given in lectures, recitations and collateral readings. Courses 51 and 52, in the order named, must precede all other courses. Each class in 53 and 54 is limited to 20 students who have completed their first year of residence; and 55 and 56, also limited to 20 students, are offered only to third and fourth year residents who are taking or have taken English Literature 57 and 58. For a fuller statement of the courses and the texts used see the departmental bulletin for this year.

FIRST SEMESTER

51. **Elocution.** Twice a week.

53. **Literary Analysis, Argumentation and Debates.** Twice a week.

55. **Shakespeare and the Drama.** Twice a week.

SECOND SEMESTER

52. **Elocution** continued. Twice a week.

54. **Oratory.** Twice a week.

56. **Shakespeare and the Drama** continued. Twice a week.

ENGLISH LITERATURE

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Professor Barrows, Assistant Professor Taylor

FIRST SEMESTER

51. **An introduction to English Literature.** Four times a week. (Must precede all other courses in this semester.)

53. **Poetry from Spencer to Milton,** exclusive of the drama. Twice a week.

55. **The English Bible:** Old Testament. Once a week.

57. **Shakespeare.** Three times a week,

59. **The Novel.** Three times a week.

61. **From Dryden to Johnson.** Twice a week.

63. **Prose, from Cowper to Ruskin,** exclusive of Fiction. Three times a week.

65. **Masterpieces.** Three times a week.

SECOND SEMESTER

52. Repetition of Course 51. Four times a week. (Must precede all other courses in this semester.)

54. **Prose, from Spencer to Milton.** Twice a week.

56. **The English Bible:** New Testament. Once a week.

58. **The Drama,** from the Miracle Plays to the Closing of the Theatres. Three times a week.

60. **The Drama since the Restoration.** Twice a week.

62. **American Literature.** Three times a week.

64. **Poetry from Cowper to Browning,** exclusive of the Drama. Three times a week.

66. **Masterpieces.** Three times a week.

Courses 65 and 66 are open to competent graduates, and to undergraduates who have taken all other Courses offered in the same semester.

Courses 59, 60, 61 and 62 alternate with 53, 54, 63 and 64.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE—OR TERM COURSES

21. **Shakespeare.** Three times a week. First term. The same as 57, except that it is limited to the first term.

22. **American Authors.** Three times a week. Second term. Open to those who take course 23.

23. **American Authors** Three times a week. Third term. Open to those who have taken course 22.

Courses 22 and 23 together are the same as course 62, with a special introduction filling the first five weeks of the second term.

All the Semester electives, from 55 to 65, are open to students who may wish to do a full year of work in this department, or who may wish to give one semester to this department and one to any other; but courses 21, 22, and 23 only can be elected by those who wish to take part of their work on one term plan. Course 52 is prerequisite to all elections.

ENTOMOLOGY

(*See* Zoology and Entomology)

EUROPEAN HISTORY

(*See* American History and Political Science)

GENERAL CHEMISTRY

(*See* Chemistry)

GEOLOGY

Professor Orton, Assistant Professor Bownocker

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE FIRST SEMESTER

51. **Cosmical Geology.** Lithological Geology, Dynamical and Structural Geology. Books of reference used in preparation of their work; Green's *Physical Geology*, Geike's *Text-book of Geology*, LeConte's *Elements of Geology*, Hunt,s *Chemical Geology*, Daubree's *Geologic Experimentale*. Five times a week.

53. **Paleontology.** Museum work. Determination of groups of Ohio fossils.

55. **Petrography I.** Laboratory and lectures. Optical crystallography, with practical determination of rock-forming, macroscopically and microscopically. Study of the igneous rocks in the hand specimen and thin section. Twice a week. The Sturtz rock collection and Voight Hochgesang thin sections of typical minerals and rocks will be carefully studied. Books of reference: Mitchel Levy—*Les Minneaux des Roches*; Rosenbusch—*Mikroscopische Physiographie der Petrographisch Wichtigen Mineralien*, 3d ed; *Mykroschpische Physiographie der Massigen Gesteine*, 2d ed.; Teall's *British Petrography*; Spottiswoode's *Polarization of Light*. Pre-requisites; Chemistry, 51 and 52; Metallurgy, 52 (Mineralogy and Crystallography.)

SECOND SEMESTER

52. **Paleontological Geology.** Historical Geology. Books of reference used by students in preparation of their work; Nicholoson's *Paleontology*, Zittel's *Paleontologie. Ohio Geological Reports, Palcontology of New York.* Five times a week.

54. Continuation of Course 53.

56. Continuation of Course 55. Twice a week.

58. **Geographic Geology.** The origin, development, and destruction of topographic forms. Rivers, lakes, oceans, ice, and winds as agents modifying the surface of the earth. The great ice age in North America.

Books of references; Journal of Geology; American Geologist; The great Ice Age; (Geike's) The Ice Age in North America; (Wright) The Reports of the United States Geological Survey; The maps of the Mississippi River Commission; etc. Five hours per week. Lectures, Recitations, map work. Third term.

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **Physical Geography.** Lectures and Recitations. Geikie's *Elementary Lessons*, supplemented by lectures, map drawing, and the study of geographical models. Five times a week. Third term

2. **General Geology.** Cosmical Geology, Lithological Geology, Dynamical and structural Geology. Books of reference used by students in preparation of their work: Green's *Physical Geology*, Geikie's *Text Book of Geology*, LeConte's *Elements of Geology*, Hunt's *Chemical Geology*, Daubree's *Geologic Experimentale*. Five times a week. First term.

Paleontological Geology, Historical Geology. Books of reference used by students in preparation of their work: Nicholson's *Paleontology*, Zittel's *Paleontologie*, *Ohio Geological Reports, Palcontology of New York.* Five times a week. Second term.

3. **Economic Geology.** Lectures. Economic materials of stratified rocks, clays, limes, cements, coals, iron, ores etc., phosphates, petroleum. Economic materials derived from veins and igneous rocks, gold, silver, copper, mercury. Gems. Books of reference used by students in preparation of their work: *Publications of U. S. Geological Survey, State Geological Surveys*, Phillips' *Ore Mining*. Five times a week. Third term.

4. **Elementary Geology.** Lectures and Recitations. Text-book: LeConte's *Class Book of Geology*. Five times a week. Second term.

GERMANIC LANGUAGES AND LITERATURES

Professor Eggers, Assistant Professor Mesloh

COLLEGES OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Elementary German.** Four times a week.

53. **Science Reading.** Twice a week.

55. **German Literature.** Lectures upon outline of German Literature. Reading of Selections. Four times a week.

57. **The German Drama.** Lectures and reading of Selections. Three times a week.

59. **Faust I.** Twice a week. (Can be taken only by those who propose to take 60.)

61. **Middle High German.** Mediaeval Lyrics. Twice a week.

63. **Deutsche Culturgeschichte.** Lectures in German. Once a week.

65. **Colloquial Exercises.** For advanced students. Twice a week.

67. **Gothic.** Wright's Primer. The relation between Gothic and allied languages will be considered. Twice a week.

69. **Old Norse.** Lectures on Grammar and Reading of Sagas.
The last two courses will alternate.

71. **Sanskrit.** Perry's *Primer*. Lectures introductory to the study of Indo-Germanic philology.

SECOND SEMESTER

52. Continuation of Course 51. Four times a week.

54. Continuation of Course 53. Twice a week. 53 and 54 must have been preceded by 51 and 52.

56. **German Lyrics.** Lectures and Reading of Selections. Four times a week. 55 and 56 must have been preceded by 51 and 52.

58. **The German Prose.** Lectures and Reading of Selections. Three times a week. 57 and 58 must have been preceded by 51, 52, 55 and 56.

60. **Faust II.** Twice a week.

62. **Mediaeval Epics.** Twice a week.

64. **Deutscher Aufsatz.** Once a week.
Courses 59, 60, 61, 62, 63 and 64, can be taken only with the approval of Professor Eggers; and must have been preceded by Courses 51, 52, 55 and 56, or their equivalents.

66. **Colloquial Exercises.** For advanced students. Twice a week.

68. **Old High German.** Lectures on Grammar and Literatnre. Reading of Selections. Twice a week.

70. **Comparative Grammar.** Lectures. Twice a week.
The last two courses will alternate.

72. Continuation of Course 71.

COLLEGE OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **Elementary.** Four times a week, through the year.

2. **Science Reading.** Twice a week, through the year.

4. **German Literature.** Four times a week, through the year.

GREEK LANGUAGE AND LITERATURE

Professor Smith, Assistant Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Elementary Greek. White's *First Greek Book* and one or two books of Xenophon's *Anabasis*. This Course is designed to meet, partially, the wants of those who are deficient in the Greek required for admission. It cannot receive University credit. Five times a week, through the year.

FIRST SEMESTER

51. **Xenophon's** *Hellenica*. Greek Prose Composition. Four times a week.

53. **Lysias**—Select Orations (Morgan). Attic Antiquities. Four times a week.

57. **Homer**—*Iliad* I-VI. Lectures on Epic Poetry. Three times a week.

59. **Lectures on History of Ancient Art.** Twice a week.

61. **The Attic Drama.** Lectures, collateral readings, and quiz. Twice a week.

SECOND SEMESTER

52. **Herodotus**—Book VII. Myers' *History of Greece*. Four times a week.

54. **Homer**—*Iliad*. Four times a week.

58. **Sophocles'** *Oedipus Rex*. Lectures on Attic Drama. Three times a week.

60. Continuation of Course 59.

62. **The Attic Drama.** Rapid reading of two or three plays. Twice a week. Must be preceded by 61.

COLLEGE OF ENGINEERING

1. **Lectures on History of Ancient Art.** Twice a week, through the year. Not given in 1900-'01.

HISTORY

(*See* American History)

HORTICULTURE

Professor Lazenby, Mr. Cunningham

1. **Elements of Horticulture.** Lectures and practice in laboratory, greenhouse, gardens, orchard, ornamental grounds and forest. A study of special garden crops, preparation of soil, drainage and irrigation, fertilizers, tools and implements, buildings and weeds.

Propagation, multiplication, germination, transplanting, budding, grafting and pollinating.

Greenhouse construction and management; crops of the vegetable forcing-house.

5. **Pomology and Viticulture.** Four times a week. First term.

6. **Winter Gardening and the Nursery.** Four times a week. Second term.

7. **Small Fruit Culture.** Including the theory and practice of spraying plants. Four times a week. Third term.

8. **Elements of Floriculture.** History and description of flowering plants. Twice a week. First term.

9. **Commercial Floriculture.** Twice a week. Second term.

10. **Amateur or Home Flower-Gardening.** Management of house plants, ferneries, wardian cases, climbing vines and flowering bulbs. Twice a week. Third term.

11. **Arboriculture.** Lectures and field work. A study of native trees and shrubs; their uses for shelter, shade and ornament; method of propagation, culture. Twice a week. First term.

12. **Forestry.** Lectures and recitations. A study of the influence of forests upon soils, crops and climate; value of trees for timber; how to improve existing woodland; establishment and management of plantations of forest trees; forestry in Europe. Twice a week. Second term.

13. **Landscape Gardening.** Lectures and practice. The principles of æsthetics as applied to natural scenery; the adornment of home and public grounds, including landscape engineering, landscape architecture and landscape horticulture. Twice a week. Third term.

INDUSTRIAL ARTS AND SHOPWORK

INDUSTRIAL ARTS

Associate Professor Sanborn, Mr. Knight, Mr. Weick, Mr. Smyser, Mr. McIntire.

1. **Tools Machines.** Lectures and recitations on hand and machine tools and the principles of mechanism and mechanics underlying their design, construction and operation. Three times a week.

2. **Designing.** Problems in drawing and design to accompany Course 1. Three drawing periods a week.

3. **Shop Equipment, Appliances and Management.** A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction: shop and factory buildings and their construction: power, power transmission and prime movers: automatic machines and other special devices for turning out cheap and accurate work: methods of compensation and shop accounts and management. Three times a week.

4. **Advanced Designing.** Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacturing plants; to accompany Course 3. Three drawing periods a week.

5. **Workshop and Appliances.** Lectures and problems on the construction of shop buildings and the arrangement of machinery; power required and the means of transmission: friction in line-shafting and the efficiency of machinery: automatic machines and special shop appliances. Three times a week.

6. **Machine Design.** Application of the principles of mechanics and strength of materials to the problems of machine designing. Five times (ten hour's practice) a week.

SHOPWORK

1. **Carpentry and Pattern Making.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns and core boxes; and enough elementary moulding to illustrate draft, parting, cores, etc. (Required in all Engineering Courses, except Civil Engineering. For time requirements see Courses.)
2. **Forging.** Exercises and practice in iron and steel forging, including such operations as drawing, bending, forming, upsetting, welding and the making and tempering of punches, drills, chisels, lathe tools and springs. (Required in all Engineering Courses, except Civil Engineering, and Chemistry. For time requirements see Courses.)
3. **Foundry Work.** Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass, and the pouring of castings. (First term of second year of Course in Mechanical Engineering, and third term of second year of Course in Industrial Arts.)
4. **Chipping and Filing.** Exercises and practice in vise work, including chipping in cast and wrought iron; surface filing, squaring, fitting, finishing, and the scraping of surface plates. (Required in all Engineering Courses, except Civil, and Chemistry and Short Mining. For time requirements see Courses.)
5. **Machine Work.** Exercises and practice in hand-turning in iron and brass on speed lathes; and straight and taper turning, boring, fitting, chucking, thread-cutting, etc., on engine lathes. (Third term of second year of Course in Mechanical Engineering, and second and third terms of third year of Course in Industrial Arts, and second term of second year of Short Course in Industrial Arts.
6. **Advanced Machine Work.** Exercises and practice on planer, shaper, drill, milling and grinding machines; the construction of the working parts of actual machines; and the making, tempering and grinding of standard plugs, counter bores, milling cutters, drills, taps, reamers, etc. Three hours a week. (First and second term of third year of Mechanical Engineering Course, and first, second and third terms of fourth year of Course in Industrial Arts, and third term of second year of Short Course in Industrial Arts.)

LATIN

Professor Derby, Assistant Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 51, 52, 53 and 54, in the order named, must precede the Elective Courses 55, 56, 57, 58, 61, 62, 63, 64, 65 and 66.

FIRST SEMESTER

51. **Livy**—Books I and II: **Cicero**—*Cato Major*, or *Laelius*. Four times a week.
53. **Horace**—*Odes*, *Satires* and *Epistles*; **Pliny**—*Letters*. Four times a week.
55. **Roman Historians.** Three times a week. [Not offered in 1898–'99.]
57. **Roman Philosophy.** Three times a week.
59. **Pharmaceutical Latin.** Five times a week.
61. **Linguistics, and Inscriptions.** Twice a week.
63. **Teachers' Course.** Twice a week.
65. **Roman Rhetoric and Oratory.** Three times a week. [Not offered in 1898–'99.]

SECOND SEMESTER

52. **Early Latin Comedy**—Plautus and Terence. Four times a week.
54. **Tacitus**—*Histories;* **Juvenal**—*Satires.* Four times a week.
56. **Elegiac Poets**—Catullus, Tibullus, Propertius. Three times a week. [Not offered in 1898–'99.]
58. **Ovid, Lucan, Martial**—Selections. Three times a week.
60. **Pharmaceutical Latin**—Continuation of Course 59. Five times a week.
62. Continuation of Course 61. Twice a week.
64. Continuation of Course 63. Twice a week.
66. **Later Latin Writers.** Three times a week. [Not offered 1898–'99.]

COLLEGE OF PHARMACY

1. **Pharmaceutical.** Five times a week. First, second and third terms.

LAW

FIRST YEAR

FIRST SEMESTER

Elementary Law (Robinson, Walker and Blackstone).

SECOND SEMESTER

Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

FIRST SEMESTER

Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

SECOND SEMESTER

Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

THIRD YEAR

FIRST SEMESTER

Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Fetter).

SECOND SEMESTER

Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones); Suretyship (Baylies).

MATHEMATICS

Professor Bohannan, Assistant Professor McCoard, Mr. Arnold, Mr. Swartzel, Mr. Rasor, Miss Ball

A. TERM COURSES

1. **Elementary Algebra.** *Venable.* Five times a week. First term. (Short Course in Agriculture).
3. **Plane Geometry.** *Venable.* Five times a week. First or second terms.
3*a*. **Plane Geometry.** *Venable.* Five times a week. Second term. (Short Courses in Agriculture and Clay-working and Ceramics).

13. **Solid Geometry.** *Venable.* Five times a week. Second term.

14. **Plane Trigonometry.** *Loney.* Five times a week. First or third terms.

15. **Analytical and Spherical Trigonometry.** *Loney*, with notes on Spherical Trigonometry. Twice a week. Second term.

16. **College Algebra.** *Taylor.* Three times a week. Second term.

17. **Plane Analytics.** *Loney.* Five times a week. Third term.

18. **Analytics and Differential Calculus.** *Loney. Venable. Edwards.* Five times a week. First term.

19. **Differential Calculus.** *Edwards.* Five times a week. Second term.

20. **Integral Calculus.** *Edwards.* Five times a week. Third term.

11. **Differential Equations.** *Edwards.* Once a week. First term.

8. **Least Squares.** *Merriman.* Twice a week. First term.

B. SEMESTER COURSES

FIRST SEMESTER

55. **Plane Trigonometry** (*Loney*) and 57, **Algebra** (*Taylor*). Five times a week.

59. **Analytics** (*Loney, Venable*) and 61, **Differential Calculus** (*Edwards*). Five times a week.

63. **Advanced Mathematics.** Topics will be changed from year to year to meet the wishes of the students. Selections may be made from the following courses: (a) Advanced Calculus (*Picard, Houel*); (b) Differential Equations (*Johnson Murray, Forsythe, Craig*); (c) Higher Plane Curves (*Salmon*); (d) Advanced Analytical Geometry (*Casey, Salmon*); (e) Analytical Geometry of Three Dimensions (*Chas. Smith, Frost, Salmon*); (f) Theory of Equations (*Burnside and Panton*); (g) Modern Higher Algebra (*Chrystal, Salmon, Serret, Cole's Netto*); (h) Modern Geometry (*Cremona, Reye, Steiner, Von Staudt, Chasles*); (i) Determinants (*Muir*); (j) Elliptic Functions (*Weber, Halphen, Durege, Hermite, Greenhill, Briot and Bouquet*); (k) General Theory of Functions (*Forsythe, Harkness and Morley, Tannery, Weierstrass, Durege, Thoame, Biermann*); (l) Potential Function (*Clausius, Riemann, Dirichlet, Peirce*); (m) Mathematical Theory of Electricity (*Mascart and Foubert*); (n) Higher Geodesy (*Clarke, Helmert, Jordan*); (o) Spherical Harmonics (*Byerly, Ferrers, Heine*); (p) Mathematical Optics; (q) History of Mathematics. Five times a week.

65. **Problems on all past work.** Once a week.

67. **Algebra, Analytics, Calculus.** Three times a week.

SECOND SEMESTER

56. **Algebra** (*Taylor*), and 58, **Plane Analytics** (*Loney*). Five times a week.

60. **Calculus and** 62, **Differential Equations.** (*Edwards*). Five times a week.

64. Continuation of Course 63. Five times a week.

66. Continuation of Course 65. Once a week.

68. **Trigonometry, Analytics, Calculus.** Three times a week.

MECHANICAL ENGINEERING

Professor Magruder, Associate Professor Hitchcock, Mr. Judd, Mr. Hale

3. **Mechanism.** Lectures and recitations on the principles of mechanism and mechanical movements. Five times a week. Second term.
The accurate laying out of movements, embodying the principles of mechanism. Twice a week. Third term.

6. **Analytical Mechanics.** Five times a week. First and second terms.

7. **Strength of Materials.** Recitations and lectures on the elastic and ultimate resistance of the materials of engineering to stress and their use in structures and machines. Lectures on elementary hydraulics and the flow of water through orifices and pipes over weirs, and in streams, and on measuring the same. Five times a week. Third term.

8. **Thermodynamics.** Lectures and recitations on the transformation of heat and mechanical energies. Ideal indicator diagrams of steam, air and gas engines; the flow of gases through pipes and orifices. Five times a week. Third term.

9. **Prime Movers.** Lectures and recitations on steam and gas engines, turbine water wheels, valve movements and governors; their construction, operation, efficiency and economy. Five times a week. First term.

10. **Steam Boilers.** Lectures and recitations on steam boilers, furnaces, automatic stokers, gas producers and boiler appliances; their construction, operation, efficiency and economy. Five times a week. Second term.

12. **Experimental Engineering Laboratory.** Twice a week. First term. Third year.

13. The same. Four times a week. First term. Fourth year.

14. The same. Four times a week. Second term. Fourth year.

15. The same. Three times a week. Third term. Fourth year.

16. The same. Four times a week. Third term. Third year, Electrical Engineering.

17. The same. Three times a week. Second term. Fourth year, Civil Engineering.

Courses 12, 13, 14, 15, 16, 17, 24 and 25, in the Experimental Engineering Laboratory are arranged to meet the needs of the different students in obtaining experimental practice in the use and calibration of accurate measuring instruments; in testing illuminating and lubricating oils for friction, endurance, and the like; in the calibration and adjustment of gauges and springs; in testing the strength and elasticity of the materials of construction in tension, compression, torsion, flexure, shear, and impact; in the flow of liquids and gases; in the use of the steam engine indicator and transmission and absorption dynamometers; in testing of steam separators, injectors, steam pipe coverings; belt, rope and chain gearing; in setting valves and eccentrics; in making efficiency tests of simple and compound, condensing and non-condensing steam engines; of steam boilers and complete power plants; of gas and hot air engines; of pulsometer steam and centrifugal pumps; of hydraulic rams and of impulse and turbine water wheels.

18. **Machine Design.** Recitations on Unwin's *Machine Design*, with lectures on American Practice. Five times a week. First and second terms.

20. **Hydraulic Machinery.** Recitations and lectures on pumping machinery. Twice a week. Third term.

21. **Thesis Work.** Five times a week. Third term.

22. **Timber and Masonry.** Lectures on the construction of foundations and structures in timber and masonry. Five times a week, the last three-fifths of second term.

23. **Materials of Construction.** Lectures on the materials used in architecture and building construction, and laboratory exercises on their properties. Five times a week. First term.

24. **Experimental Engineering Laboratory.** Three times a week. First and second terms. Elective to third year and fourth year engineers.

25. **Experimental Engineering Laboratory.** Three times a week. Third term. Fourth year, Civil Engineering.

METALLURGY AND MINERALOGY

Professor N. W. Lord, Mr. Somermeir

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

52. **Mineralogy.** Lectures, with frequent quizzes on notes and with study of specimens in the collection of minerals. A short introductory course is given on crystallography, illustrated by wooden models. Text Book: Dana's *Manual Mineralogy and Lithology.* Last nine weeks of Second semester.

COLLEGE OF ENGINEERING

2. **Mineralogy.** Lectures. Similar to Course 52 in College of Arts, Philosophy and Science, but more practical, and arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three times a week. Third term.

3. **Determinative Mineralogy,** laboratory course in practical determination of minerals by physical and chemical tests. Each student is furnished with a set of apparatus, and works under an instructor's inspection. Brush's *Determinative Mineralogy* is used as a manual. Five times a week. Third term.

4. **Metallurgy.** A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the modes of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five times a week. First and second terms.

5. **Metallurgical Laboratory.** Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuels and slags, and the assay of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical works. Course 5 must be preceded by Agricultural Chemistry, Courses 1, 8, 9; or by General Chemistry, Courses 7 and 12. Five laboratory periods a weeks. Three terms.

6. **Assaying.** Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Oral instruction, with references to standard books on assaying. Five laboratory periods a week. Second term.

7. **Metallurgical Construction.** Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three times a week. First term. (Professors Lord and Ray.)

8. **Ore Dressing and Coal Washing.** Lectures. Instruction in the methods of concentrating and enriching ores and fuels by mechanical means. Lectures with reference to Rittinger's *Aufbereitung;* Callon's *Course d' Exploration des Mines;* Kunhardt's *Ore Dressing*, and various papers in technical journals. Twice a week. First term.

9. **Mineral Chemistry.** Lectures and laboratory practice. Lectures upon fire damp, mine explosions, explosives, boiler, waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five hours a week. Third term.

MILITARY SCIENCE AND TACTICS

Lieutenant Martin

1. **Military Drill.** Three times a week through the year.
2. **Tactics.** Lectures and recitations. Twice a week. Second term.
3. **Art of War.** Lectures and recitations. Twice a week. Second term.

MINE ENGINEERING

Associate Professor Ray

Elementary Algebra. (Mathematics 2). Wentworth. Five times a week. Three terms.

1. **Mine Surveying.** Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing-room. Five times a week. First term.

2. **Ventilation and Haulage.** Lectures illustrated by experiments and maps of mines and models when possible, tests by safety lamps and anemometers, and solution of air distribution in coal mines. Five times a week. Second term.

3. **Mine Operating.** A course of lectures and practical instruction in mine bookkeeping and accounts. cost of working, etc., particularly adapted to Ohio coal mining. Five times a week. Third Term.

4. **Mine Surveying.** Field practice in the use of instruments for surface and underground surveys. Full notes are taken, and maps and plans made in the drawing room. Davie's *Surveying*, by Van Amringe, is used as a text-book. Five times a week. First term.

5. **Mine Engineering.** Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five times a week. Through the year.

6. **Plans and Specifications.** Five times a week. Third term. [Profesors Lord and Ray.]

PHARMACY

Professor Kauffman, Assistant Professor Dye

6. **Pharmacy.** General pharmaceutical processes. Lectures three times a week First term.

7. **Pharmacy.** United States Pharmacopeia official preparations. Lectures twice a week. Laboratory practice daily. Second term.

8. **Dispensatories.** Official preparations. Lectures twice a week. Laboratory practice daily. Third term.
9. **Pharmaceutical Chemistry.** Unofficial preparations. The National Formulary. Lectures twice a week. Laboratory practice daily. First term.
10. **Extemporaneous Pharmacy.** Prescription practice. Lectures once a week. Laboratory practice three times a week. Second term.
11. **General Practice.** Lectures twice a week. Dispensing practice daily. Prescription practice daily. Third term.
12. **Materia Medica.** Official drugs and classification. Three times a week. First term.
13. **Materia Medica.** Official and unofficial drugs. Three times a week. Second term.
14. **Materia Medica and Therapeutics.** Synthetic Products. Poisons and Antidotes. Three times a week. Third term.
15. **Pharmaceutical Assaying.** Three times a week. First term.
16. **Methods of Manufacture.** Three times a week. Second and Third terms.
17. **General Pharmacy.** Two lectures, three laboratory periods a week. Through the year.
18. **Laboratory.** Special work for Veterinary students. Five times a week. Third term.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

(Course Preparatory to Medicine)

FIRST SEMESTER

51. **Pharmacy.** General pharmaceutical processes. Lectures three times a week.

SECOND SEMESTER

52. Continuation of Course 51, with Laboratory practice.

PHILOSOPHY

Professor Scott, Mr. Wissler

FIRST SEMESTER

51. **Psychology. Logic begun.** Four times a week. Required in the Courses for B. A., B. Ph. (L.), and B. Ph. (M. L.)
53. **Psychology.** Three times a week. Required in the Courses for B. Ph. (E.), B. Sc., for Law and Journalism, and for Medicine.
55. **Ethics.** Three times a week. Required in Course for B. Ph. (E.)
57. **History of Ancient and Mediaeval Philosophy.** Three times a week. Elective after Courses 51 and 52.
59. **Introduction to Philosophy.** Twice a week. Elective after Courses 51, 52, 56 and 57 or after Courses 53, 54, 55, and 56.
61. **Physiological and Experimental Psychology.** Twice a week. Elective.
63. **Leading Works in Philosophy.** Twice a week. Elective on the same conditions as Course 59.

SECOND SEMESTER

52. **Logic completed and Ethics.** Four times a week. Follows Course 51.

54. **Logic.** Three times a week. Follows Course 53.

56. **History of Modern Philosophy.** Three times a week. Required after Course 55. Also elective after Courses 51 and 52.

60. **Metaphysics.** Twice a week. Elective after Courses 51, 52, 57 and 56 or after Courses 53, 54, 55 and 56.

62. **Physiological and Experimental Psychology.** Twice a week. Elective.

64. **Leading Works in Philosophy.** Twice a week. Elective on the same conditions as Course 60.

PHYSICS

Professor Thomas, Assistant Professor Boyd, Mr. Brown

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY.

1. **Elementary Physics.** Recitations and experimental lectures. Five times a week. First and Second Terms. Text: Carhart & Chutes' "Elements of Physics." (Required in all Short Courses.)

2. **Mechanics and Heat.** Electricity and Magnetism, Sound and Light. Lectures and recitations. Three times a week. Through the year.

3. **Physics.** Extension of Course 2, with practice in solution of problems. Twice a week. Through the year.

4. **Electricity and Magnetism.** Lectures and recitations. Three times a week. First term. (Third year, Electrical Engineering.)

5. **Physical Laboratory.** Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and heat. Three times a week. Second and third terms.

6. **Physical Laboratory.** Theory and practice of magnetic and electrical measurement, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields, magnetic moments, permeability: work in light including optical constants; spectroscopy; photometry of gas, electric and other lights. Five times a week, First, second and third terms. (Third year, Electrical Engineering.)

7. **Physical Laboratory.** Two to three times a week. Through the year. Course 7 must be preceded by Course 2.

9. **Physical Laboratory.** A second year's work in the Physical Laboratory. Three times a week, with five hours' credit. Course 9 must be preceded by Course 7.

The work in the Physical Laboratory begins with exercises in length, mass and time measurement, making use of scales, tapes and bars, micrometer screws, micrometer microscopes, the dividing engine, the cathetometer, the balance, chronometors, chronoscopes, etc. This course is intended to give the student facility in the use of instruments and knowledge of the theory of their construction and adjustment.

The determination of various physical constants follows, with elementary exercises in heat, light, electricity and magnetism; after which the student takes up such advanced work as his taste and skill permit. The experimental work is accompanied by instruction in methods and in the discussion of results.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Mechanics, Heat, etc.** Three times a week. Second year, Science Course. Elective in the First year of the Courses of Arts and Philosophy.

53. **Mechanics Sound and Heat.** One lecture, two laboratory periods a week. Elective in the First year of the Courses of Arts and Philosophy. Required in the First year of the Course Preparatory to the Study of Medicine.

55. **Laboratory.** Three to five times a week.

57. **Laboratory.** Three to five times a week. Course 57 must be preceded by Course 55.

SECOND SEMESTER

52. **Electricity, Magnetism, etc.** Three times a week. Follows Course 51.

54. **Electricity, Magnetism, etc.** One lecture, two laboratory periods a week. Follows Course 53.

56. **Laboratory.** Continuation of Course 55.

58. **Laboratory.** Continuation of Course 57.

60. **Laboratory.** Two hours a week. First year of Course Preparatory to the Study of Medicine.

PHYSIOLOGY

(*See* Anatomy and Physiology)

POLITICAL ECONOMY

(*See* Economics)

POLITICAL SCIENCE

(*See* American History and Political Science.)

RHETORIC AND ENGLISH LANGUAGE

RHETORIC

Professor Denney, Assistant Professor Taylor, Assistant Professor Graves, Mr. Parker

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Paragraph Writing.** Themes. Twice a week.

53. **Analysis of Prose.** Themes. Four times a week.

55. **Rapid Writing.** Preparation of articles for the Press. Once a week.

57. **Brief-Making and Argument.** Three times a week.

59. **Poetics.** Twice a week. Special permission necessary.

61. **Rhetorical Theory.** Special investigations, reports and discussions. Two hours a week. Students must have special permission to carry this work.

63. **Advanced Rhetoric.** Twice a week.

SECOND SEMESTER

52. **Practical Rhetoric.** Themes. Twice a week.

54. **Analysis of Prose.** Repetition of Course 53. Four times a week.

56. **Rapid Writing.** Continuation of Course 55. Once a week.

58. **Studies in Exposition.** Types of the English Essay; book reviews. Three times a week.

60. **Short Stories.** Lectures and Practice. Twice a week.

62. **Problems in Criticism.** Special investigations, reports, and a thesis. Two hours a week. Must be preceded by Course 61.

64. **Advanced Rhetoric.** Twice a week.

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **Paragraph Writing and Practical Rhetoric.** Themes and Exercises. Twice a week, three terms.

3. **Advanced Rhetoric.** Twice a week, three terms.

4. **Advanced Composition.** Twice a week, three terms.

ENGLISH LANGUAGE

Professor Denney

FIRST SEMESTER

51. **Old English** (Anglo Saxon). Prose. Twice a week.

53. **Middle English and Historical English Grammar.** Twice a week.

SECOND SEMESTER

52. **Old English** (Anglo Saxon). Poetry. History of the Language. Must be preceded by Course 51. Twice a week.

54. **Middle English and Historical English Grammar.** Twice a week.

ROMANCE LANGUAGES

I. FRENCH

Professor Bowen, Dr. Brush

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Elementary French.** Four times a week. Grammar: Edgren's (Part I) or Joynes' Minimum, with written exercises. Reader: Super's (from Part II) or Whitney's (Parts I and II). In this course the study of the language is taken up from the beginning. Stress is laid at first upon the acquisition of a correct pronunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end.

53. **Science Reading.** Two times a week. A course introductory to the vocabulary of scientific literature, designed to familiarize the student with technical terms and style. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

55. **Modern French Literature.** Four times a week. Contes and Novels: Bercy's Contes et nouvelles modernes: Balzac, Eugénie Grandet. Prose composition: Edgren's French Grammar [Syntax]. Lectures supplement the work; private reading required; systematic attention given to syntax and idiom. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

57. **French Comedy.** Three times a week. Study of the growth of French Comedy, with work centering upon Molière [four plays], Regnard [Le Joueur] and Beaumarchais [Le Barbier de Séville]. Lectures and collateral reading. Open to those who have completed Courses 55 and 56.

59. **Advanced Prose Composition.** Once a week. Practice in speaking and writing French. Intended for advanced students who desire special training on the practical side of the language. Open to those who have completed Courses 55 and 56.

61. **French Tragedy.** Three times a week. Racine and Voltaire. Lectures and readings, with assigned topics, reports and discussions. Must be preceded or accompanied by Course 57. [Not offered in 1899–1900.]

63. **French Literature Before the Seventeeth Century.** Three times a week. Advanced work as in Course 61. Special study of la Chanson de Roland. Must be preceded or accompanied by Course 57.

SECOND SEMESTER

52. **Modern Prose and Plays.** Continuation of Course 51. Four times a week. Historical and narrative prose; one or more prose comedies. Sight reading is emphasized.

54. **Science Reading.** Continuation of Course 53. Twice a week.

56. **Modern French Literature.** Continuation of Course 55. Four times a week. Lyric Poetry: Bowen's Modern French Lyrics. Drama: Comparative study of the classical and the romantic drama: Corneille, Horace; Hugo, Hernani.

58. **Recent French Prose Writers.** Three times a week. Bourget, Daudet, Zola, and others. Open to those who have completed Courses 55 and 56.

60. **Advanced Prose Composition.** Continuation of Course 59. Once a week.

62. **Chateaubriand and the Precursors of the Romantic Movement.** Three times a week. Lectures and readings, with assigned topics, reports and discussions. Must be preceeded by course 57. [Not offered in 1899–1900.] Toward the close of the year lectures will be given on: Methods of teaching French and the teacher's equipment.

64. **The Development of the French Novel.** Three times a week Advanced work, as in Course 62. Must be preceded by Course 57.

COLLEGES OF AGRICULTURE AND ENGINEERING

1. **Elementary French.** Four times a week throughout the year. Grammar and reader, modern prose and plays, as in Courses 51 and 52.

2. **Modern French Literature.** Four times a week throughout the year. The work is the same as in Courses 55 and 56. Open to those who have completed Course 1.

3. **Science Reading.** Twice a week throughout the year. The work is the same as in Courses 53 and 54. Open to those who have completed Course 1 (or an equivalent).

II. ITALIAN

Dr. Brush

51. **Grammar and Readings.** Two hours a week. First Semester. Grandgent's Italian Grammar and Bowen's First Italian Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French. (Given in alternate years; will not be offered in 1899–1900.)

52. **Goldoni and Dante.** Continuation of Course 51. Two hours a week. Second Semester.

III. SPANISH

Professor Bowen

51. **Grammar and Readings.** Twice a week. First Semester. Manning's Spanish Grammar and Matzke's First Spanish Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French.

52. **Calderon and Cervantes.** Continuation of Course 51. Twice a week. Second Semester.

SANSKRIT

(*See* Germanic Languages)

SHOPWORK

(*See* Industrial Arts)

SOCIOLOGY

(*See* Economics and Sociology)

VETERINARY MEDICINE

Dr. White, Dr. Lavery, Dr. Fredericks, Mr. Brumley

COLLEGES OF AGRICULTURE AND VETERINARY MEDICINE

11. **Osteology.** Lectures illustrated with skeletons and anatomical preparations. Dissections. Five times a week. First term.

12. **Myology.** Splanchnology and Angiology. Practical dissections and demonstrations on cadavers. Five times a week. Second term.

13. **Lectures, Illustrated in the Dissecting Room and on Anatomical Models.** Five times a week. Third term. Books of reference and recommended for study: Chauvau's *Comparative Anatomy* (Fleming's translation); Strangeways; McFadyean; Mueller and Leisering.

14. **Lectures and General Pathology.** Five times a week. First term.

15. **Special Pathology and Therapeutics of Sporadic Diseases.** Non-infectious Internal Diseases. Five times a week. Second term.

16. **Special Pathology and Therapeutics of Non-Infectious Diseases of the Horse, Ox, and Dog.** Five times a week. Third term.

17. **Diseases of the Cow.** Three hours a week. Second term.

18. **Surgical Diseases and Operations.** Lectures: illustrated by practical demonstrations by drawings, on living animals in the clinic, and on cadavers in the dissecting room. Five times a week. First, second and third terms. Books recommended: As text-book, Mueller's *Operative Veterinary-Surgery* (Dollar's translation). Liantard's *Manual of Operative Veterinary Surgery*, Beyer.
19. **Horse, Cattle, and Dog Clinic in the Veterinary Hospital.** Stationary and Ambulatory. The clinics are held at 10–11 A. M. (standard) and are free. Animals left in the Hospital are treated by the students of the junior and senior years, under the superintendence of the clinical professor.
20. **Special Pathology and Therapeutics of Infectious and Contagious Diseases.** Five times a week. First term.
21. **Special Pathology and Therapeutics of Infectious and Contagious Diseases.** Three times a week. Second term. Texts: Fröehner-Freidberger, Williams, Robertson.
22. **General Therapeutics.** Lectures. Texts: Ellenberger and Hoffmeister. Five times a week. Third term.
23. **Obstetrics.** Lectures and demonstrations. Anatomy and pelvic organs. Diseases before and after parturition. Obstetrical operations and manipulations. Books: Fleming's Franck's *Obstetrics*. Three times a week. First, second and third terms.
24. **General Surgery.** Practical work, such as the more common operations which a regular practitioner would be called upon to perform. All this work is done by the student upon chloriformed live animals purchased for the purpose. Five times a week. First term.
25. **Anatomical Laboratory.** Practical work in Topographical Anatomy, as a review of Anatomy for senior students. Books: McFadyean, Schmaltz's Plates.
26. **Principles of Horse-shoeing.** Lectures and demonstrations. Includes all the diseases of the foot due to bad paring, shoeing, etc. Books: Leisering, Fleming.
27. **Meat Inspection.** Lectures on Inspection of Meat and Milk. Five times a week. Books: Walley, Ostertag.
28. **Anatomy.** Five times a week. First term.
29. **General Pathology.** Five times a week. Second term.
30. **Special Pathology and Therapeutics of Infectious and Contagious Diseases.** Five times a week. Third term.

ZOOLOGY AND ENTOMOLOGY

Professor Osborn, Assistant Professor Hine, Mr. Landacre

COLLEGE OF AGRICULTURE

1. **Invertebrate and Vertebrate.** Three times a week. Invertebrate, First and second terms; Vertebrate, Third term.

3. **Economic Entomology.** Insects of Forests, Orchard and Garden. Five times a week. Third term.

4. **Economic Entomology.** Twice a week, through the year. This course must be preceded by Course I.

7. **Systematic and Practical Entomology.** Two lectures and one laboratory period a week. Third term.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **Comparative Zoology.** Two lectures and one laboratory period a week.

53. **Comparative Anatomy of Vertebrates.** A laboratory course. Three laboratory periods a week.

55. **Comparative Anatomy of Vertebrates.** A laboratory course. Five laboratory periods a week.

57. **Zoology and Anatomy.** Advanced laboratory. Three laboratory periods a week.

59. **Zoology and Anatomy.** Advanced laboratory. Five times a week.

61. **Entomology.** An advanced Practical Course. Five laboratory periods a week. This Course must be preceded by Courses 51 and 52, or 1, or 4, or 7 in the College of Agriculture.

65. **Ornithology.** Two laboratory periods a week. Open to those who have had Zoology 51, or its equivalent.

SECOND SEMESTER

52. Continuation of Course 51. Lectures twice a week. One laboratory period.
54. Continuation of Course 53. Three laboratory periods a week.
56. Continuation of Course 55. Five laboratory periods a week.
58. Continuation of Course 57. Three laboratory periods a week.
60. Continuation of Course 59. Five laboratory periods a week.
62. Continuation of Course 61. Five laboratory periods a week.
64. **Comparative Zoology.** Three lectures and one laboratory period a week.
66. Continuation of Course 65.

Courses 57, 58, 59, 60, 61, 62, must be preceded by Course 1 in the College of Agriculture, or Courses 51, 52, or 53, 54, or 64; or an equivalent taken elsewhere.

The student may choose his work from any of the following:

(a) The Exhaustive Anatomy and Histology of the Frog.
(b) Comparative Anatomy of Invertebrates.
(c) Invertebrate Embryology.
(d) Vertebrate Embryology.
(e) Comparative Neurology.
(f) Cellular Biology.

A student whose major lies in Zoology may take two full years work, selected from subjects named in the foregoing list.

ENROLLMENT

1897-1898

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

GRADUATE STUDENTS—3

Baker, William Hollister, B. Agr., 1892..... Farmersville, M
Cunningham, John Ferguson, B. Sc. (H. & F.), 1897.....Columb
Fox, Charles Pinckney, B. Agr., 1890; M. Agr., 1895..... Columb

FOUR-YEAR COURSES—68

	Course	Course Hours	Credit Hours	
Abbott, Arthur Grant.....	Agr.	202	148	Medina
Ackland, Richard Edward.....	†		12	Columbus
Armstrong, Clara.....	Dom. Sci.	203	40	Columbus
*Aten, Franklin Stewart.....	Agr.	204	110	Nevada
Ayers, Samuel Dana.....	Agr.	204	104	Hartsgrove
Beattie, Lena Leota.....	†		90	Zanesville
Belden, Herbert Lucius.....	Agr.	206	53	Middlefield
Britton, William Miller.....	Agr.	206	15	Columbus
Britton, John C., B. Sc. (Agr).....				Mt. Gilead
Bryson, Julia Leona.....	†		8	Columbus
*Clawson, Clarence.....	Agr.	202	166+21	O'Kena
Conradi, Albert Frederick.....	Agr.	206	48	New Bremen
*Davis, Vernon Hayes.....	Agr.	204	123	Byesville
*Dixon, Eva Nicholson.....	Dom. Sci.	203	26	Columbus
*Dresbach, Mary..	Dom. Sci.	203	45	Columbus
*Duncan, Donnelly Hyre..	Agr.	206	36	Ludlow
*Erf, Oscar.....	Agr.	202	171	Monroeville
Fearn, Nellie.....	Dom. Sci.	203	8	Columbus
*Fippin, Elmer Otterbein.....	Agr.	204	133	Galloway
*Fitts, Rollin.....	Agr.	204	135	Elyria
Flickinger, George A., B. Sc. (Agr.).....				York
*Galehouse, David William.....	Agr.	206	83	Doylestown
Gibbs, Ola W.....	†		8	Columbus
*Gibson, Herbert R.....	Agr.	206	54	Camp Chase
Gilmore, William Henry.....	Agr.	202	184	Millersport
*Givens, David Albert.....	Agr.	206	96	McGaw
Hains, Edna Esther.....	Dom. Sci.	203		Bloomingburg
*Harper, Merritt.....	Agr.	206	45	Grove City
*Hayden, Cassius Clay.....	Agr.	204	100	Oakdale
*Henderson, Frank A.....	Agr.	204	122	McConnelsvill
*Huff, Haines.....	Agr.	204	93	Leesburgh

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Hunt, Mary	Dom. Sci.	203	46	Legal, Ill.
*Imes, Marion	Agr.	202	154+21	Bashan
Johnston, Fred S	Agr.	204	182	Pierpont
Joyce, Mary Gertrude	Dom. Sci.	203	45	Columbus
*Kolbe, Lawrence Albert	Agr.	206	26	North Amherst
*Liles, Frederick William	Agr.	206	12	Collins
Long, Frederick Pontius	Agr.	206	15	Kingston
Loomis, Humbert H	Agr.	202	171	Deerfield
Mason, Arthur Devillo	Agr.	206	45	Wellington
Miller, Carl James, B. Sc. (Agr.)				Franklin
Miller, Merritt Finley	Agr.	204	115	Ridpath
Mills, William C., B. Sc. (H. & F.)				Mt. Vernon
*Mooney, Charles Napoleon	Agr.	202	119	Milan
McCall, Arthur Gillet	Agr.	202	104	McGaw
McClelland, Chalmer Kirk, B. Sc. (Agr.)				Andover
*McOwen, James, Jr	Agr.	204	81	Ovid
*Neill, Nelson Prentice	Agr.	206	40	Venice
Nettleton, Albert Warren, B. Sc. (Agr.)				Medina
Palmer, Mary Ella	†		8	Columbus
Perry, Elma Brooks	Dom. Sci.	203	61	Troy
*Perry, John Cole	Agr.	206	46	Columbia Sta.
*Pierce, Benjamin Manly	Agr.	206	45	Ringgold
*Postle, Stuart A	Agr.	206	58	Camp Chase
Roberts, John Livingston	Agr.	204	99	Vaughnsville
*Schaeffer, Freelan Wilbert	Agr.	204	73	Spanker
*Sigrist, John Larkum	Agr.	206	28	Congress
*Snyder, Addison Hogan	Agr.	206	49	Tacoma
Steward, Charles Benjamin	Agr.	204	117	Marcy
*Taylor, Everett Buren	Agr.	206	26	New Albany
*Taylor, Frederick Wellington	Agr.	206	81	Wooster
*Thompson, Frank McColgan	Agr.	206	8	Georgetown
Twitchell, Lee Downs	H. & F.	206	30	Mansfield
*Tyler, Fred J	H. & F.	204	104	Perry
Waid, Clarence William, B. Sc. (H. & F.)				Emery
Warden, Leonard C	H. & F.	204	141	Avon
*Weisman, Laura Anna	Dom. Sci.	197	107	Columbus
*Whiting, Roy Eugene	Agr.	206	26	Austinburg

*Preparatory work incomplete.
†Irregular—not candidates for degree.

SHORT COURSES

AGRICULTURE—41

	Course Hrs.	Credit Hrs.	
Adams, Walter Lewis	98		Columbus
Anderson, Joseph Buchanan	98	49+2	Jewitt
Baldwin, Linus R	98	40+5	Tigar
Breeze, Clarence Nye	98	44+4	Lima
Brinker, Thomas William	98	51	Chatham
Clevenger, Charles Henry	98	53+15	Fletcher.
Cotton, Edward Charles	98	53	Elyria
Demorest, Herbert Russell	98	56	Columbus
Ditto, Theodore Walter	98	98+23	Delphos
Dyer, Harry Spencer	98	59	Rainbow
Falknor, Earl Andrew	98		Ludlow
Finlay, Thomas Kirkwood	98	53+4	Keene
Fisher, Elmer Ellsworth	98	48	Chili, Ind
Gearing, Benjamin Louis	98		St. Mary's
Gilmore, Walter Hayes	98	68+2	Millersport
Gladding, Maynard Marcus	98	63	Windsor
Goodwin, Clare F	98	66	Columbus Station
Harris, Melvin Jay	98		Garrettsville
Hershey, Benjamin Westhefier	98	13	Easton
Houston, Maurice Charles	98	20	London
Kelley, William Lester	98	50+2	Newark
Leedy, Herbert Emerson	98	37	Belleville
Mackey, James Earle	98	60+6	Richfield
Marion, Walter Jerid	98	40+3	Amanda
McClellan, John Arthur	98	51	Cable
McKay, Welden Nickerson	98	29+5	New Burlington
McOwen, Thomas	98	10+2	Ovid
Palmer, Roland Jay	98	48+1	Penfield
Parsons, John Strong	98	98+35	Rootstown
Partridge, Burt Mitchell	98		Flint
Peters, Royal S	98	37	Zanesfield
Ream, Earl Sheldon	98	51	Hustonville, Ky
Ridinger, John Gilbert	98	53	Kalida
Rubens, Frank	98	93+10	Kenton
Sanders, Boston Corbett	98	38	Steubenville
Stimmel, John Russell, Jr	98	57	Ruse's
Thompson, Jay	98	36+17	Sandusky
Thornburg, Clarence Edward	98	15	Highland
Uncapher, Jesse Darius	98	37	Marion
Whipple, Charles Mantanion	98	73	Medina
Wilken, Walter William	98	15	Columbus

DOMESTIC SCIENCE—3

	Course Hrs.	Credit Hrs.	
Hill, Mamie Faye	90	27	Columbus
Postle, Florence	90	60	Camp Chase
Riley, Valeria	90	72	Washington C. H.

DAIRYING—29

Beard, Alexander Wilson.....New Buffalo
Bragg, Putnam Benjamin.....Marietta
Comstock, Allen L.....West Richfield
Durbin, Theodore.....Danville
Garner, Clarence Harris.....New Concord
Givens, Warren Wheeler.....De Kalb, Ill
Givens, Warner Hayes.....De Kalb, Ill
Gove, Charles Frederic.....Mechanicsburg
Gregory, William Moody.....Elizabeth City, N. C
Grimes, Charles Wilson.....Napoleon
Horst, David H.....Winesburg
Hugenholtz, Paul.....East Las Vegas, New Mexico
Minnich, J. F.....Gratiot
Minnich, Otto William.....Gratiot
McFarlane, Ellis.....New Bedford, Pa
Oatman, William Frank.....Dundee, Ill
Ohlemacher, John Jacob.....Prout's Station
Owens, Walter Raleigh.....Schumm
Patterson, Mrs. George T.....———
Phillips, John Christopher.....Akron
Pollock, Charles Hamilton.....Mill Village, Pa
Reed, Jasper Robert.....Yellow Springs
Roadamer, Harry.....Selma
Robb, Wyman Speer.....New Concord
Ross, Amos Lorin.....Wooster
Smith, Elisha.....Richville
Smith, William David.....New Concord
Spencer, Silas McLaren.....Chrome Hill, Md
Stoughton, Charles Peter.....Alpine, N. Y

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

GRADUATE STUDENTS—24

Brown, Frank.....Columbus
Clements, Frank Orville.....Westerville
Clum, George Victor, B. A.....Mendota, Ill
Clum, John Ellsworth.....Thornville
Collison, Frank Jerome, M. D.....Columbus
Copeland, Sarah Foster.....Columbus
Coursault, Jesse Harliaman, B. A.....Columbus
Derby, Florence Harlow, B. Ph.....Columbus
Fay, Mona L., B. Ph.....Sidney
Flynn, Oscar R., B. Sc.....Columbus
Frankham, Charles R.....Westerville
Fullmer, Edward Lawrence, B. Sc.....Defiance
Maag, Benjamin.....Mt. Eaton
Milne, Alexander B. D. (Yale University).....Columbus
McFadden, Thomas Gilbert.....Dayton

Riddle, Lumina Cotton, B. Sc.....Columbus
Rightmire, George Washington, B. Ph.....Columbus
Smith, Alice May, B. Ph.....Columbus
Snively, H. H.....
Stevens, Frank Lincoln, B. S., M. S.....Columbus
Talbot, Mignon, B. A.....Columbus
Turner, Frederick Lewis, B. A.....Columbus
Watson, Edward Thompson, B. Sc.....Chillicothe
Williams, Herbert Oswald, B. A.....Columbus
Winchet, Frances Isabelle, B. L. (Smith College).....Dayton

FOUR-YEAR COURSES—324

	Course	Course Hours	Credit Hours	
Abbott, Roy A.	E. Ph.	128	72	Columbus
Andress, Edna Alice	†		23	Birmingham
*Ayers, Lloyd C.	Arts.	126	6	Findlay
Baird, Burgess Clay	L. Ph.	126	30	Troy
*Baldwin, Elizabeth Grant	E. Ph.	126	97	Columbus
Baldwin, Frederika Hull	E. Ph.	128	33	Columbus
*Ball, Danforth Ewers	Science.	126	30	Columbus
Bancroft, Gay, B. A			...	Columbus
Barcus, Eliza	Arts.	126	46	Columbus
Barlow, Helen M., B. Ph.			...	Columbus
*Barnet, Clarence Elwood	E. Ph.	128	68	New Paris
*Barr, Fred W	E. Ph.	128	25	Brice
Beardsley, Orsamus Drake, B. Ph.			...	Garrettsville
*Beatty, Carrol E.	E. Ph.	128	29	Columbus
*Beck, Edwin Long	L. Ph.	126	24	Lithopolis
*Beekman, Minnie Rose	Arts.	126	28	Columbus
Bell, Florence Louise	E. Ph.	128	69	Columbus
*Bell, John Everett	Arts.	126	77	Ripley
*Bevard, Olive Blanch.	E. Ph.	128	47	Columbus
Blair, Kate Ruth	†		15	Wilmington
Bock, Harrison William	†		79	Canton
Bodman, Mary Elizabeth, B. Ph			...	Bement, Ill.
Bostwick, Homer Z	Arts.	126	60	Columbus
*Boyer, Anna Marie	E. Ph.	128	60	Columbus
Brandt, James Herbert	Arts.	126	98	Greencastle
*Bratton, Alice May	E. Ph.	128	24	Columbus
Brelsford, Harley, B. Ph.			...	Christiansburg
*Brooks, Stanley Grange	Science	126	15	Columbus
*Brown, Albert Marion	Arts.	126	24	Wauseon
*Brown, Haywood Gale	Arts.	126	48	Dayton
*Burnett, Whittier	L. Ph.	126	70	Waynesville
*Burris, Margaret May	L. Ph.	126	16	Columbus
*Butcher, Fredric Eric	E. Ph.	128	64	Buckland
Butler, Blanche Woodruff	Arts.	126	32	Wellsville
Butterworth, William Hartwell, B. A.			...	Columbus
Canfield, Dorothea Frances	L. Ph.	126	84	Columbus

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
*Chamberlain, Robert M.	Science	126	25	Columbus
*Chambers, Henry Brooks	M. L. Ph.	126	16	Cambridge
*Clagett, Wilson Grafton	L. Ph.	126	21	Dayton
Clum, Harry Ernest	E. Ph.	126	99	Thornville
*Cockins, Rutherford Hayes	E. Ph.	126	90	Columbus
Colgan, Lillian Katherine	Arts.	126	29	Columbus
*Collins, Walter Scott	Arts.	126	36	Columbus
*Connor, Alice Marie	E. Ph.	128	55	Columbus
*Connor, Ellen Josephine	E. Ph.	128	68	Columbus
Converse, Walter	Arts.	126	90	Plain City
Corner, Daisy	L. Ph.	126	60	Columbus
*Corner, Edith	L. Ph.	126	24	Columbus
Coursault, Ida M.	E. Ph.	128	99	Columbus
*Courtright, Elizabeth Pauline	Arts.	126	42	Columbus
Courtright, Stella Van	L. Ph.	126	29	Columbus
Courtright, J. Loring	Arts.	126	70	Circleville
*Crawford, Mary B.	E. Ph.	128	62	Blaine
*Creamer, Ansel Brooks	Science.	126	49	Jeffersonville
*Cummings, Lawrence Belding	Arts.	126	24	Columbus
*Cureton, Benjamin Fletcher	Arts.	126	46	Columbus
*Curran, Bernard Franklin	Science.	126	54	Corning
*Darst, Otto Custer	Arts.	126	9	Columbus
Davis, Amy King	†		...	Columbus
Davis, Ivy Belle	†		24	Columbus
DeFrees, John Kessler	Arts.	126	37	Troy
*DeGolley, Lloyd Parsons	Arts.	126	21	Mt. Gilead.
*Dever, Louisa	M. L. Ph.	126	37	Portsmouth
DeWitt, Maud Mary	Science.	126	63	Sandusky
Dickinson, George Codwice	Arts.	126	36	Columbus
*Dickinson, Thomas Herbert	E. Ph.	126	101	Columbus
Dietrich, George Craig, B. Ph			...	Piketon
*Dill, Augusta Dille	E. Ph.	128	69	Columbus
Doan, Frank Carleton, B. Ph			...	Nelsonville
*Dowd, Charles Fuller	M. L. Ph.	126	62	Toledo
Dowd, George Kurtz	Arts.	126	110	Toledo
Dufour, Alice	†		21	Columbus
Dun, Katherine Thompson	†		26	Columbus
*Durbin, Samuel Clyde	E. Ph.	128	68	McConnelsville
*Durstine, Florence Sarles	Arts.	126	34	Columbus
*Dwyer, Robert	Arts.	126	...	London
*Eagleson, John Hervey	Arts.	126	56	Columbus
Eagleson, Joseph Pentecost	Arts.	126	49	Columbus
Eisenbise, Bertha	E. Ph.	128	63	Columbus
Eisenlohr, Berthold August, B. Ph			...	Cincinnati
*Enlow, Charles Bates	E. Ph.	128	62	Bridgeport
Euans, William Weldon	E. Ph.	128	48	Columbus
Ewalt, Clara Converse	E. Ph.	128	33	Columbus
Faurot, Ethal Edward	E. Ph.	128	11	Peru, Ind.
*Feibel, Louis	E. Ph.	128	20	Hillsboro

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
*Feick. Clara Sophie	Science.	126	26	Sandusky
Feiel, Ida Louise, B. Ph			...	Columbus
Fergus, Oma Leona	†		16	Humboldt, Neb.
Fischer, Robert, B. Sc			...	Columbus
*Fisher, Ida May	L. Ph.	126	58	Columbus
Fitterer, John Conrad, B. Sc			...	Butler
Ford, Ruth Lanissa, B. A			...	Ashtabula
Ford, Stanley Hamer, B. Ph			...	Columbus
Fox, Ross Garfield	E. Ph.	128	45	Columbus
Fullerton, Charles Hayward, B. Ph			...	Wheelersburg
Gamper, Hattie	M. L. Ph.	126	66	Columbus
Garber, Levi Lucius, B. Ph			...	Bellville
*Gayman, John	E. Ph.	128	17	Can. Winchester
Geren, Helen Oneta	E. Ph.	128	52	Columbus
*Gordon, Sarah Bryarly	Arts.	126	18	St. Mary's
*Gorman, Edward Albert	Arts.	126	20	Columbus
*Graham, Reuben Jacob	Arts.	126	18	Northup
Gray, Genevieve, B. Ph			...	Columbus
*Green, Nellie Vitura	L. Ph.	126	54	Columbus
Greener, Gussie Howe	L. Ph.	126	32	Columbus
Gruen, Frank William	E. Ph.	126	89	Columbus
Haigler, Charles Edmund, B. Sc			...	Jeffersonville
*Hambleton, Ethel Ada	L. Ph.	126	32	Columbus
Harris, Charles Pearl	E. Ph.	128	78	West Liberty
Harrop, Herbert B., B. Sc			...	Columbus
*Hartford, Martha Dudley	L. Ph.	126	64	Atlanta, Ga.
Hartsough, William Howard, B. Ph			...	Columbus
Harvey, Florence Danford	B. Ph.		...	Mt. Perry
*Harvey, Lucy Manola	Arts.	126	29	Pomeroy
Harward, Arthur Byron	Arts.	126	50	Columbus
Hastings, Edwin G., B. Sc			...	Austinburg
Hatton, Edna Bernice	L. Ph.	126	26	Columbus
*Hauk, Will Comrie	Arts.	126	29	S. Charleston
Hazelton, Bird, B. Ph			...	New Straitsville
*Hazelton, Henson Marlow	E. Ph.	128	56	New Straitsville
*Henderson, Herbert B	M. L. Ph.	126	63+3	Laceyville
*Hendrixson, Alice	E. Ph.	128	64	Columbus
*Henry, George Garr	E. Ph.	128	86	Columbus
*Herrman, Bessie	E. Ph.	128	69	Worthington
Herms, Edith Selma, B. Ph			...	Portsmouth
Herrick, Sara Ethel	L. Ph.	126	22	Wellington
*Hetsel, Frank	Arts.	126	15	Xenia
Heywood, Harry Nelson	E. Ph.	128	28	Wapakoneta
*Hicks, Nellie	Arts.	126	26	Centerburg
Hirsch, Rudolph	Science.	126	26	Columbus
Hoffman, Hattie De Long	E. Ph.	128	46	Columbus
*Holcomb, Harry John	Arts.	126	26	Columbus
*Holston, John George Frederick	Science.	126	8	Zanesville
Hoover, Fred. R	E. Ph.	126	86	Quincy
*Houghton, Henry Spencer	Arts.	126	40	Columbus

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Howard, Anna Faye	Arts.	126	85	Columbus
Huffman, Lillian Stuart	L. Ph.	127	94	Columbus
*Huggins, Burch Delaplaine	L. Ph.	127	93	Hillsboro
*Hunt, Mary Fulton	L. Ph.	126	44	Columbus
*Hunt, Wallace Leedom	Science.	126	26	St. Paris
*Hunter, Anna Eliza	M. L. Ph.	126	10	Columbus
*Hunter, Edith Virginia	M. L. Ph.	126	18	Columbus
*Huston, Frank Arilda	Arts.	126	24	Columbus
*Jaynes, Allan Brown	E. Ph.	128	72	Columbus
*Johnson, George M	E. Ph.	128	5	New Straitsville
*Johnston, Charles Orsan	Arts.	126	12	Columbus
*Jones, John William	E. Ph.	128	31	Jackson
Jones, Richard Thomas	L. Ph.	126	72	Columbus
*Jones, Victor Waite	E. Ph.	128	33	Columbus
Karshner, George Melville	Arts.	126	55	Columbus
*Kauffman, Margaret Glenn	L. Ph.	126	19	Columbus
*Kauffman, Henrietta Christine	L. Ph.	126	24	Columbus
*Keating, David Thatcher	L. Ph.	126	72	Columbus
Kellerman, Karl Frederick	Science.	126	70	Columbus
Kellerman, Ivy, B. A			...	Columbus
Kellicott, William Erskine, B. Ph			...	Columbus
Kendell, Bernard Jacob	L. Ph.	126	59	Covington
Kinder, Gordan Donald	E. Ph.	128	49	Ottawa
*King, Robert James	Arts.	126	99	Zanesville
Kinkead, Robert Grant	†		5	Kansas City, Mo.
Kirby, Harriet Rebecca, B. Ph			...	Columbus
Knight, Caroline Estell	E. Ph.	128	56	Columbus
*Kohl, Clayton Charles	L. Ph.	126	50	Perrysburg
Kohr, Donald Alexis, B. Ph			...	Westerville
Krumm, Herbert Zettler, B. Ph			...	Columbus
Kugel, Daisy Alice	Science.	126	49	Sandusky
Lane, Quinton R., B. Ph			...	Can. Winchester
*Leach, Herbert Van	E. Ph.	128	11	Wellston
Lehman, John Wesley	E. Ph.	126	94	Can. Winchester
*Lentz, Florence	M. L. Ph.	126	24	Marysville
*Lisle, Charles Howard	E. Ph.	128	49	Pataskala
Lisle, Dallas Gypsi	L. Ph.	127	98	Columbus
Lisle, Leslie Mac	L. Ph.	127	102	Columbus
List, Erma Alice	L. Ph.	126	76	Columbus
Logsdon, Carey Ligouri	L. Ph.	127	89	Columbus
Louchery, Edna Elizabeth	E. Ph.		...	Salem, W. Va
Luse, Jessie Edna	E. Ph.	128	84	Columbus
Lydenburg, Walter B., B. A			...	Dayton
Lynas, Charles Edmund, B. A			...	Columbus
Lynas, Caroline, B. A			...	Columbus
*Lyons, Nellie	L. Ph.	126	16	Columbus
Mabee, Alphonso Benjamin	M. L. Ph.	126	26	Mansfield
Mann, Wilbur Edwin	L. Ph.	127	103	Morrisville
*Marriott, Robert Henry	Science.	126	30	Richwood

*Preparatory work incomplete.

†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Martell, Leonard Roland, B. A			...	Columbus
*Martz, Velorus	Arts.	126	32	Columbus
*Meade, Caroline Annis	M. L. Ph.	126	24	Columbus
Mickey, Blanche Dell, B. Ph			...	Columbus
Miller, Fred. A	E. Ph.	128	31	Columbus
Miller, Gretchen Pauline	E. Ph.	128	70	Columbus
*Mills, Glendora	L. Ph.	126	58	Marysville
*Mills, Helen	L. Ph.	126	97	Gallipolis
*Mitzenburg, Allena May	L. Ph.	126	26	Columbus
Mock, Marcia Inez	L. Ph.	126	32	Columbus
Moon, Clarence Victor	L. Ph.	126	45	Farmer's Station
Moore, Edgar Howard	Science.	126	71	Columbus
Moss, Blanch, B. A			...	Columbus
Mullay, Rose B	†		41	Columbus
Mumma, Marion W	Science.	126	34	Dayton
*Mundhenk, Herbert C	E. Ph.	128	75	Brookville
*Mundhenk, Ruth	Science.	128	109	Dayton
Munson, Theodore S., B. Sc			...	Zanesville
Murdock, George Washington	E. Ph.	126	97	Carroll
*Murray, Edna Earl	E. Ph.	128	25	Columbus
*McAllister, Earl Saddler	E. Ph.	128	29	Columbus
*McCallum, Raymond	Science.	126	52	Dayton
*McDonald, Joseph Sylvester	E. Ph.	128	26	Rendville
McKinney, Frank Cowan	Arts.	126	38	Columbus
McLaughlin, Clarence Graham	L. Ph.	126	30	Columbus
McNeil, A. W	†		...	
Nash, Simeon	Arts.	126	32	Columbus
Nichol, Gertrude Belle	E. Ph.	126	107	Columbus
Ohlemacher, Dorothea Katherine	Science.	126	53	Sandusky
*Oppenheimer, Olive	Arts.	126	28	Alleghany, Pa
Orton, Samuel Toney	Science.	126	30	Columbus
*Osborn, Abner Andrews	Science.	126	60	Columbus
Osburn, Raymond Carroll, B. Sc			...	Columbus
Outhwaite, Charles P	†		24	Columbus
Palmer, Elmer Bennett	Science.	128	106	Columbus
Palmer, Fannie	Arts.	126	26	Columbus
Parker, John Bernard, B. A			...	Danville
*Parmenter, William Watt	Arts	126	56	Mt. Vernon
*Parsons, George McLellan	L. Ph.	126	16	Columbus
*Patterson, Bertha Gildersleve	Arts	126	40	Columbus
*Pavlicek, Frank J	L. Ph.	126	32	Toledo
*Pemberton, Harvey Cannon	E. Ph.	128	57	Locust Grove
Pitts, Grace Lenore	L. Ph.	126	62	Columbus
*Poole, Loren Winfield	E. Ph.	228	26	DeGraff
*Porter, George Henry	L. Ph.	126	18	N. Philadelphia
Powell, Maria Elizabeth	Arts	126	85	Columbus
Prall, Anna Dickson, B. A			...	Columbus
*Pulling, Margaret Glaze	L. Ph.	126	54	Columbus
Pumphrey, John Homer, B. Sc			...	Clayton
Rasor, Samuel Eugene, B. Sc			...	Clayton

* Preparatory work incomplete.
† Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
*Raymond, Maybelle	E. Ph.	128	16	Columbus
Raymond, Maud	E. Ph.	126	103	Columbus
*Rector, James Manary	Science.	126	10	Circleville
Redick, Mary Glisson, B. Ph			...	Findlay
Redrow, Walter Leffingwell	Science.	126	68	Williamsburg
*Reeb, Margaret Katharine	E. Ph.	128	40	Columbus
Rees, Edith Celeste	Arts	126	32	Columbus
*Reese, David R	Arts.	136	29	Shawnee
*Reynolds, Benjamin Roy	L. Ph.	126	6	Columbus
Rice, Katharine	†		6	Columbus
Rice, Mabel Elise, B. A			...	Columbus
Rice, Mary Washington	Arts	126	99	Columbus
Rice, Susan Esther	Arts	126	95	Columbus
Richardson, William Waddle	L. Ph.	127	100	Columbus
Rickey, Tallmadge Archer	E. Ph.	128	62	Columbus
Rietz, Henry Lewis	Science.	128	105	Gilmore
*Roach, Simeon Andrew	L. Ph.	127	108	Chillicothe
Robbins, George A	E. Ph.	126	93	Columbus
*Robertson, Harry Bradbury	E. Ph.	128	...	Pomeroy
Robinson, Zella Vina, B. Ph			...	Columbus
*Rockwell, Mary Fannie	E. Ph.	126	102	Columbus
*Roebuck, Carl Fletcher	E. Ph.	128	66	Dalton
*Rogers, Frank P	Arts	126	103	Columbus
*Rolfe, Richard Weston	†		6	Willoughby
Roney, Mary Malvina	L. Ph.	126	30	Columbus
*Russell, Sallie Mary	M. L. Ph.	126	2	Xenia
*Sackett, Carl Leroy	†		32	BigHorn C., Wyo
*Sadler, Anna Belle	L. Ph.	126	21	Columbus
Sage, Edith W	†		16	Columbus
Sayre, Charles Boyd	Arts	126	58	Columbus
Scarlett, Henry L	Arts	126	32	Columbus
*Schaff, Mae B	L. Ph.	126	54	Columbus
*Scott, Dudley	E. Ph.	128	55	Columbus
*Scott, Walter Abner	Science.	126	70	Fair Haven
Seney, George Eppert, Jr	†		35	Toledo
Seymour, Raymond Jesse	Science.	126	64	Columbus
*Sharkey, Clare Griesmer	Science.	126	36	Eaton
*Shaw, Harry R	E. Ph.	128	34	Zanesville
Shield, Wallace Bates, B. A			...	Kansas City, Mo.
*Shoop, Edith Adele	L. Ph.	126	26	Columbus
Shuck, Carey Lucas, B. Ph			...	Vanlue
Shurtz, Olive L., B. Ph			...	Columbus
Singleton, Charles T	E. Ph.	128	50	Columbus
*Skiles, Blanch Gertrude	†		23	Shelby
Slaughter, Nellie Elizabeth	†		37	Columbus
Smith, Albertine Charlleen	E. Ph.	128	57	Columbus
*Smith, Virginia Roletta	E. Ph.	128	68	Columbus
Spencer, Ralph Oliver	Arts.	126	98	Columbus
Sperry, Wilmot, Jr	E. Ph.	128	23	Mt. Vernon

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Sprague, William Ralph	E. Ph.	126	96	La Porte, Texas
*Steeb, Carl E	E. Ph.	126	98	Medina
*Stephenson, Bertram Sheaver	L. Ph.	126	24	Jackson
Stimson, Charles Leslie	Arts.	126	96	Columbus
*Stimson, George	Arts.	126	56	Columbus
*Strimatter, Albert	Arts.	126	64	Columbus
Sutherland, Margaret, B. Ph			...	Columbus
Sylvester, John E., Jr., B. Ph			...	McArthur
Talbot, Herbert Swan, B. Ph			...	Columbus
Taylor, Mrs. Sterling B	†		3	Columbus
Tessier, Effie Helen	L. Ph.	126	61	Sandusky
Teter, Sumner	Science.	126	43	Columbus
*Thomas, Lawrence David	L. Ph.	126	56	Lancaster
*Thompson, King Gibson	Science.	126	29	Georgetown
*Tilton, Josephus Howard	E. Ph.	128	44	Jelloway
*Travis, John F	Arts.	126	45	Green Camp
Underwood, Ella, B. A			...	Columbus
Vance, Mary Grace, B. A			...	Columbus
Vornholt, Julius Franklin, B. A			...	New Bremen
*Ward, Lila Lucile	L. Ph.	126	32	Reynoldsburg
Warden, Hosea Gilford	E. Ph.	128	58	Columbus
*Weick, Carrie Rosina	Science.	126	54	Columbus
*Weld, Harry Porter	L. Ph.	126	52	Marysville
*Welling, Faith Cornelia	Arts.	126	34	Worthington
*Wells, Harry B	Arts.	126	7	Columbus
Wertz, Edward Sleeser	E. Ph.	126	97	Dalton
West, Earle Downs	Arts.	126	64	Columbus
*Wildermuth, AndrewLe Roy	L. Ph.	126	42	Columbus
Williams, Caroline Louise	†		30	Austin, Texas
Williams, Eliza Young	Arts.	126	23	Pomeroy
*Williams, Clara Maude	M. L. Ph.	126	48	Columbus
Williamson, Edward Bruce, B. Sc			...	Bluffton, Ind.
Wilson, Stella Shoemaker	†		34	Columbus
Wilson, Louis Ernest	E. Ph.	128	38	Columbus
*Worcester, Wood Frank	E. Ph.	126	105	Columbus
*Wright, M. James	Arts.	126	72	Worthington
*Young, Arthur Sprague	E. Ph.	128	31	Geneseo, Ill
*Young, John Wesley	L. Ph.	127	102	Columbus
Young, Mary Grace	M. L. Ph.	126	68	Mt. Vernon

COURSE PREPARATORY TO LAW AND TO JOURNALISM—30

	Course Hours	Credit Hours	
*Aldrich, Daisy Pearl	†	29	North Columbus
*Baldwin, Harry John	98	29	Beverly
*Bradford, William Shubrick	98	31	Columbus
*Bradrick, Lura Edith	†	16	Columbus
*Brooks, Narena	98	20	Zanesville
*Burgess, James Henry	†	30	Big Horn, Wyo

*Preparatory work incomplete.
† Irregular—not candidates for degree.

	Course Hours	Credit Hours	
*Cannon, Anna Catharine	98	28	Columbus
*Clouse, Jacob Ralph	98	...	Loudonville
*Creamer, Fred Byron	98	20	Washington C. H.
*Danner, Mary B	98	33	Canal Fulton
*Determan, Hugo Philip	98	32	Columbus
*Evans, Thomas Daniel	98	22	Newark
*Flanagan, Curran E	98	...	Kenton
Fowler, Verna Jacquine	†	21	Columbus
Gayman, Charles Welton	†	38	Canal Winchester
*Grant, Earl Cranston	98	11	Grove City
*Hare, Walter Benjamin	98	21	Columbus
*Hatcher, Albert Lawrence	98	24	Kingston
*Hemley, Dudley Custer	98	15	Toledo
*Laybourn, Lawrence E	98	19	Springfield
*Leonard, Wellington Taylor	98	35+12	Mansfield
*Minshall, Thaddeus Ellis	98	51	Chillicothe
Robinett, Henry Scott	98	...	Pataskala
*Sharp, Stephen Albert	98	47	Lowell, Kan
*Skiles, Roscoe Carleton	98	50	Shelby
*Sparks, Homer H	98	21	Columbus
*Thrall, Mary Josefa	98	53	Carey
*Ulsamer, Fritz Martin	98	...	Gallipolis
*Veneman, Nevin Edward	98	24	Dayton
*West, Frederick Rollin	98	36	Columbus

COURSE PREPARATORY TO THE STUDY OF MEDICINE—9

	Course Hours	Credit Hours	
*Anderson, John Milton	101	44	Greenville
Baldwin, Hugh Allen	101	100	Columbus
Defenbacher, John Frederick	101	34	Canal Dover
*Dollison, Harvey Clinton	101	72+2	Zanesville
Faeth, Victor Peter	101	58+4	Bucyrus
Hill, Walter Centennial	101	97+12	Berlin Heights
McDonald, Daniel Moore	101	53	Wellsville
Neiswender, Lisle W.	101	34	Grove City
Williams, Horton	101	73	Worthington

COLLEGE OF ENGINEERING

GRADUATE STUDENTS—2

Fox, John Herbert, M. E. Lucas
Judd, Horace, M. E. South Hadley Falls, Mass

*Preparatory work incomplete.
†Irregular—not candidates for degree.

FOUR-YEAR COURSES—265

	Course	Course Hours	Credit Hours	
Arnold, Edwin Ebert, M. E.			...	Zanesville
* Atkinson, Warren	M. E.	220	93	Greenville, S
Auten, Robert Love	Ind. Arts.	202	24	Fredericktow
* Bailey, Edward Harding	M. E.	220	30	Damascus
* Balz, Ernest	C. E.	212	35	Columbus
* Bargar, Frederick Chase	M. E.	220	23	Columbus
Barnaby, Charles London, C. E.			...	Columbus
Barrie, James White	C. E.	212	117+9	Ashland
Barringer, Lawrence Eugene	Ceramics.	207	107+5	Wash'gton, I
Barrows, Harry Holbrook, C. E.				Columbus
Bishoff, John Wallace	E. M.	208	138+11	Elk G'den, W
Blake, John Tower	C. E.	212	64	Canton
Bleininger, Albert Victor	Ceramics.	207	78+31	Cleveland
Blesch, Carl Edward	M. E.	220	32	Columbus
Blose, Miller L	E. E.	216	158	Urbana
Boehme, Adolph Joe	M. E.	220	50	Youngstown
* Bogardus, Evert	M. E.	220	25	Mt. Vernon
Borger, Charles S.	M. E.	220	52+8	Columbus
Bott, George Robert	M. E.	220	46	Columbus
Bowditch, John Henry	C. E.	212	55	Tracy
Bradley, William Hay	M. E.	220	52	Shelby
Braun, Joseph George	Special.		5	Columbus
Brophy, James Francis	E. M.	208	139	Elk G'den, W
* Brown, Ernest Edwards	Chemistry.	202	64	Columbus
Brown, John Quincy	M. E.	220	191	Ironton
Brown, Wallace S.	M. E.	220	10	Poland
Bryant, Phillip Earnest	E. E.	217	126	S. Haven, Mi
Buchenberg, Alvin Earnest	E. E.	216	162	Holgate
* Butler, William Lawrence	Ceramics.	207	9+6	Wilkes Barre
Butterworth, Robert Burns	E. E.	220	66	Columbus
* Bygate, Harry Goldsmith	M. E.	220	163+2	Steubenville
Cain, John	E. E.	220	58	Urbana
Cameron, Harry Ezra	C. E.	212	53	Lisbon
*Cavanaugh, Andrew Francis	M. E.	220	109	Dayton
Chandler, Arthur Bernard	Ceramics	207	29	Steubenville
*Chandler, Fred	Ind. Arts	202	19+7	Salem, Va
Chappell, Walter Evans, E. E.				Barnesville
*Childs, Maxwell	E. E.	220	4	Troy
Clark, Clarence Julian	C. E.	211	127+16	Wilberforce
*Clark, Leonard Knight	M. E.	220		Columbus
Claypoole, Albert	M. E.	220	150+3	Columbus
Clegg, Richard Lincoln	†		46	Peoria
*Clevenger, Joseph Franklin	Ind. Arts.	202	47	Fletcher
Coe, Maurice Allen	†		4	Buena Vista
Cook, Herbert	†		5	Columbus
*Cooke, Royal Alston	E. E.	220	60+5	Wyoming
Cosley, Harvey Harter	C. E.	212	53	Troy
Crabill, Pearl	M. E.	220	53	Springfield

* Preparatory work incomplete.
† Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Crable, Arthur	C. E.	212	79	Columbus
*Crumley, Cloise Hamilton	E. E.	220	51	Lancaster
Curtis, Leigh Goodrich	C. E.	211	104	Hamilton
Dean, Edgar W	E. E.	220	43+2	New Lexington
*Debs, Victor Albert	E. M.	208	64	Mt. Vernon
Denny, Charles Wampler	E. E.	220	46	Middletown
DeWolf, Roger Dennison	E. E.	220	54+2	Madison, Ga
*Dierdorff, Percy Cyrus	E. M.	208	17+5	Columbus
Dill, Raymond	E. E.	220	57	Columbus
Donham, Albert	M. E.	220	146	Lindale
Duke, Carl Lewis	E. E.	217	104+6	Ridgeville
Dunlap, Robert Rouse	E. E.	217	108	Columbus
Elliott, Homer Philander	E. E.	217	114+6	Columbus
Engensperger, Albert	M. E.	220	83+3	Springfield
Enos, Earl E	C. E.	211	145	Defiance
*Erdmann, William	Ind. Arts.	205	127	Chillicothe
*Espy, Frank	E. E.	220	11+5	Kenton
Estep, Frank Leslie, E. E				Jeffersonville
Fergus, Guy Carlton, E. E				Tadmor
Fickes, Walter M	Ceramics.	207	96	Steubenville
Fish, Fred Alan E. E				Milan
Flynn, Benjamin Harrison, C. E				Columbus
*Follett, George Alfred	C. E.	212	38	Columbus
Fonts, Edgar W	E. E.	220	54	Piqua
*Forsyth, William Dennison	C. E.	212	5	Columbus
Frame, Rollo St. Clair	C. E.	212	51	Washington
Frankenberg, John Theodore	E. E.	216	162+4	Columbus
*Fravel, John Henry	E. E.	220	13	Columbus
Frechtling, Arthur George	M. E.	220	54	Hamilton
Freeman, George Doane, Jr	E. E.	216	173	Columbus
Freeman, Stanton Sholes, E. M				Columbus
Frost, George Winfield	M. E.	220	106	Columbus
Gamper, Herman	M. E.	220	165	Columbus
Ganson, Edwin R	E. E.	220	69+2	Columbus
*Gates, William Paul	Ceramics.	207	75	Hinsdale, Ill.
George, Robert G	E. M.	208	...	Piqua
Geren, Harry Ogden	E. E.	217	148+21	Columbus
Gilchrist, Edward Luce	E. E.	220	27	Ashtabula
Gordon, Harry J	†		...	Oak Harbor
Gottwald, Christian	E. E.	217	102	Defiance
Graham, Emory Eugene, E. E			...	Richwood
Graham, Frank	E. M.	208	29	Columbus
*Graham, Harry	E. M.	208	30+12	Columbus
Grate, Charles A., M. E			...	Yale
Green, Homer Stuart	E. E.	220	56	Raymond
*Green, Joseph Walter	E. E.	216	166	Dayton
Groves, John Wesley, C. E			...	Batavia
Hager, Le Roy William	C. E.	212	36	Piqua
Hale, Frederick James, M. E			...	Mogadore
Haly, William Stokes	C. E.	212	68	Napoleon

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Hance, Harry Thomas	Chem.	202	49	Columbus
Hapgood, Eugene Palmer	E. E.	220	43+3	Sabina
Harkins, Robert Rusk	M. E.	220	106	Columbus
Harshbarger, Elmer	C. E.	212	110+8	Jackson
*Hartley, Lowrie Claude	C. E.	212	88+2	Uniontown
Harward, Alvin Devins	E. E.	217	106	Gahanna
Hawkins, Harry Clyde	E. E.	216	202+3	Lima
Hayes, Robert Lee	E. E.	216	154	Columbus
Hayman, Will Clayton	E. E.	217	118+9	Holgate
Hedges, Benson Rice	M. E.	220	40	Columbus
Henderson, Adelbert Andrew, C. E			...	Olentangy
Henry, Carlton	E. E.	217	115	London
Hertner, John Henry	E. E.	216	174+6	Dayton
Hewitt, Strafford Reeves, E. E			...	Columbus
Hipple, John Merton, E. E			...	Jefferson
*Hord, Peyton Robert	E. E.	220	32	Marion
Houston, Frank King, Jr	M. E.	220	...	Urbana
*Howard, Oscar David	E. E.	220	83	Circleville
Hunter, Madone Carington	E. E.	217	108+3	Norwich
Huntington, Arthur	M. E.	220	150	S. Charleston
*Hylton, Gratwoods Walter	M. E.	220	13	Springfield
*Jefferey, John Ralston	†		73	Huron
Johnson, Earl S	E. E.	216	140	Plants
*Johnston, Milton Stevens	E. E.	220	63	Middletown
Jones, Arthur James, E. E			...	Fitz Henry, Pa.
Jones, Annie E.	†		94	Columbus
*Jones, Howard Matin	E. E.	220	52	Marysville
*Jones, Herbert Q	E. E.	220	53	Granville
Jorolemon, Raymond Asabel	†		42	Cato, N. Y.
Kanmacher, Herbert L	C. E.	212	12	Columbus
Kanmacher, Samuel Houston	E. E.	220	108	Columbus
Kasley, Alexander Taylor	E. E.	216	147+15	Wheeling, W.Va.
Kettler, Frank Christian	C. E.	212	53	New Bremen
*King, Herbert Sumner	C. E.	212	116+7	Medina
*King, Roy Stevenson	M. E.	220	87	Xenia
Knecht, Arthur E., M. E.			...	Cincinnati
*Knight, William Abner	M. E.	220	119	Columbus
Knouff, Oliver Morton	C. E.	212	38+2	Caldwell
Knox, Frank S	E. M.	208	135	Columbus
Krumm, Louis Robert, E. E			...	Columbus
Lamb, Whitney Earl	E. E.	217	111	Commerc'l Point
Lee, Corliss Edgar	E. E.	216	162	Pugh Post Office
*Leighty, William Nevin	E. E.	220	...	Germantown
Leinbaugh, George Gurden	M. E.	220	97+3	Bellevue
*Lemon, Albert	E. E.	220	2	Millersburg
*Lesh, John Howard	M. E.	220	86	Louisville
Linebaugh, Jesse Joseph	E. E.	216	163	Pleasant Corners
Loeb, Arthur Emanuel	E. E.	217	125+2	Columbus
Loos, Charles Louis, Jr	Ind. Arts.	202	95	Dayton

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
Lyon, Arthur Hollingshead	M. E.	220	103	Wauseon
*Machetanz, Augustus F	E. E.	220	...	Kenton
*Madden, Ernest	Ind. Arts.	202	59	Columbus
*Marckworth, Otto Stanley	Chem.	202	70	Cincinnati
Marietta, Harry Riefsnider	E. E.	220	33	Dayton
*Marsh, Charles Lawrence	C. E.	212	62	Urbana
*Marshall, Willard Beverley	E. E.	216	145	Piqua
Martin, John D., Jr	M. E.	220	90	New Straistville
*Mason, Charles Filmore	E. E.	220	44	Columbus
*Melick, Neal Albert	C. E.	212	100	Columbus
Miller, Albert Arthur	E. E.	220	48+6	Zanesville
*Miller, George John	E. E.	220	16	Kenton
*Miller, Ralph Charles	E. E.	220	36+6	Zanesville
Minor, Pearl Arline	†		...	Columbus
Morris, Clyde T., C. E			...	Columbus
Morris, Robert Hamilton	E. M.	208	46+12	Columbus
Myers, Albert B	E. M.	208	113	Columbus
McCabe, Hugh Auguste	M. E.	220	29+12	Columbus
McIntire, Alfred Heber, E. E			...	Mt. Vernon
McIntosh, Roscoe Everett	E. E.	220	41+3	Ravenna
McKee, Stanley Hayes	C. E.	211	157	Warren
Nauss, Ralph Wilty	Chem.	202	86	Greenville
Needham, Harry Smithson	M. E.	220	99+12	Columbus
*Neikirk, Jesse David	M. E.	220	7+5	Clyde
Nichols, John Lawrence Darvall	E. M.	208	78+37	Columbus
Nicholson, Charles Marion	E. E.	217	103	Columbus
Nold, John H	E. M.	208	102	Columbiana
Norton, Victor Clarence	C. E.	211	144	Southington
Nurian, Kerson	M. E.	220	151+15	Bulgaria
*Oatman, William Frank	C. E.	212	24+2	Dundee, Ill
*Oberlin, Edgar Garfield	C. E.	212	34	Massillon
*Ogbin, Clinton Vanneman	C. E.	212	65	Salem, N. J
Pabodie, Robert J	M. E.	220	163	Wyoming
Pace, Ernest James	C. E.	212	28	Columbus
*Peck, Louis Tucker	M. E.	220	73+3	Staunton, Va
Peppel, Samuel Vernon	Chem.	202	100+15	Leetonia
Peters, Arthur Edward	M. E.	220	153+14	Toledo
Phillips, William Marion	E. E.	217	93+11	Columbus
Poto, Frank B	Chem.	202	46	Alliance
*Powell, Frank Everson	C. E.	212	21+2	Columbus
Powell, Leslie Boyle	E. E.	217	80	Columbus
Pratt, Fred Kellogg	C. E.	212	99	N. Philadelphia
Ransom, Ralph P	M. E.	220	54	Mt. Vernon
Rawson, Levi	C. E.	211	160+12	Lisbon
*Richard, Arby Cyrus	M. E.	220	32	Ravenna
Riddle, Carlton	M. E.	220	164+13	Columbus
Robb, Daniel Lockwood	M. E.	220	88	Loveland
Roberts, Cyrus Swan, Jr., E. M			...	Columbus
Rogers, Rutherford Hayes	E. E.	220	27	Columbus

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours	Credit Hours	
*Roth, George Lewis	E. E.	220	9	Port Clinton
*Roy, Charles Foster	E. M.	208	49+13	Glenroy
*Roy, Robert Dougherty	E. M.	208	90+18	Glenroy
Ruhlen, Carl Marble, M. E.			...	Columbus
*Rutan, D. W.	M. E.	220	...	Mechanicsburg
*Ryland, Paul Dillen	C. E.	212	86	Columbus
*Sanderson, Ray Rochester	E. E.	220	28	Washingt'n C. H
Saxbe, Harry Moodie	E. E.	217	67+2	Urbana
*Schantz, Karl Wileham	E. E.	220	23	Zimmerman
*Schreiber, George Ernest	E. E.	220	108	Ironton
Schreiber, John Martin	E. E.	216	161	Ironton
*Schreidt, Charles Edwards	M. E.	220	9	Mansfield
Seeds, Karl Beaver	Chem.	202	57+4	Columbus
Senter, Herbert Pike	C. E.	212	44	Columbus
*Seward, Russell M	E. E.	220	21	Columbus
Sharp, John McDowell	C. E.	212	11	Columbus
*Shaw, Harry Laverdo	C. E.	212	27	Lorain
*Shepherd, Charles William	C. E.	212	92+6	Huron
*Sherman, John K.	C. E.	212	56	Columbus
*Sherwood, Frank Porter	E. E.	220	35	Ashtabula
Sherwood, Milton Worthington	M. E.	220	55	Hilliards
Shields, Samuel Mathers	Chem.	202	136	Steubenville
*Simpson, Harry Jerome	C. E.	212	36+3	Worthington
*Sims, Harry D.	Ind. Arts.	202	29	Columbus
Smiley, Emory Eldon	†		101	Wellston
Smith, David William	C. E.	212	159	Ashland
*Smith, Thomas Jefferson	E. E.	220	41	New Lexington
Snodgrass, William Howard	E. E.	220	75	Marysville
Spencer, Frederick Furman	E. E	217	89+6	Ottawa
Sprague, Clarence M.	C. E.	211	159	Summerford
Staley, Marcellus	E. E.	216	164+7	Dayton
*Stalter, Edward D.	C. E.	212	103+15	Columbus
Starbuck, Karl	E. E.	216	163	Barnesville
Stauffer, Clinton R.	E. E.	217	108	Lima, Ind
Stone, Carleton Elijah	C. E.	211	159	Gallipolis
*Stultz, Francis Potts	C. E.	212	27+4	Zanesville
Sweeney, Paul Leslie	E. M.	208	11	Columbus
Tallmadge, Trafford B.	E. E.	220	31	Columbus
Taylor, Clifford Forrest	M. E.	220	6	New Albany
Taylor, George Edwin	E. E.	220	75	Marysville
*Tufts, Charles H.	E. M.	208	165+31	Maineville
Urban, Harry Marshall, C. E.				Ashland
*Van Dyke, Clifford Steele	E. E.	220	42	Ansonia
*Van Horne, Samuel Richard	E. E.	220	40	Dayton
Van Ness, Nellie Rebecca	†		83	Mechanicsburg
Voss, Harry Lincoln	†		10	Colo. Sp'gs, Col.
*Vosskuehler, Joseph Henry	M. E.	220	129+5	Dayton
Waite, Ellison Guthrie	M. E.	220	26	Columbus
Watts, Arthur Simeon	†		42+5	Zanesville
Weber, Frederick Clarence	Chem.	202	38	Evanston

*Preparatory work incomplete.
†Irregular—not candidates for degree.

	Course	Course Hours.	Credit Hours.	
Webster, Daniel Elijah	C. E.	212	36	East Liverpool
Webster, Ellison Godfrey	M. E.	220	41	Greenville, S. C.
Weick, Charles Wm., B. Sc. (Ind. Arts)			...	Columbus
Weisman, Howard Allen	†		3	Columbus
Wheaton, Robert John	E. E.	220	30	Columbus
Whitaker, George Eliot	C. E.	212	44	East Liverpool
Whitaker, William Earl	C. E.	212	31	Wauseon
Whittemore, George Foster	E. E.	220	40	Keene
Williams, Alwin Zeliffe	†		33	Chicago
*Williams, Benjamin Seeds	M. E.	220	21+16	Lockbourne
*Williams, Frank E	E. E.	220	18	Columbus
Williams, Fred Richard	E. E.	216	151+8	Columbus
Williamson, Homer Davison	E. E.	220	73	Monroe
Wilson, James Somerville	M. E.	220	110+12	Columbus
Wirthwein, Louis Philip	C. E.	211	159	Columbus
Wise, Albert Joseph, C. E			...	Suffield
Wonder, Homer Higgins	Chemistry.	202	29	Carey
*Zbinden, Herman Christian	C. E.	212	45	Toledo

ARCHITECTURE—11

	Course Hours.	Credit Hours.	
Fenimore, Edward Compton	154	73+3	Columbus
Grimm, Arthur Adin Hibbs	154	20+33	Columbus
Howell, Carl Eugene	154	95+39	Columbus
*Mills, James Dwight	154	69+26	Columbus
*Robbins, Frank Smith	154	27	Middletown
Scott, Cyrus Ellison	154	6	Columbus
Steinle, Charles Frederick	154	56+2	Fremont
Thomas, David A. P	154	38	Columbus
*Weiland, John	154	83+9	New Lexington
Wight, Frank Ernest	154	90+15	Columbus
*Worcester, Wolsey G	154	47+40	Columbus

SHORT COURSES

CERAMICS—12

	Course Hours.	Credit Hours.	
Berkey, Leslie Reese	90	26+5	Bolivar, Pa
Biglow, Ernest Osborn	90	43+20	West View
Butler, John Francis	90	46+20	Austin, Texas
Cambell, Augustine Ray	90	90	Metuchen, N. J
Crooks, George Henry	90	20	Zanesville
Davis, George A	90	35+6	Shawnee
Davis, Thomas John	90	30+19	Girard
Gerke, Karl Bertram	90	75+9	Quincy, Ill
Post, Malcolm Phelps	90	45+6	St. Louis, Mo

*Preparatory work incomplete.
†Irregular—not candidates for degree.

Purdy, Ross C	90	90+30	Buffalo, N. Y
Reed, Robert Carter	90	20	Portsmouth, Va
Simcoe, George	90	26	North East, Md

INDUSTRIAL ARTS—2

	Course Hours.	Credit Hours.	
Jacobs, Ronald	96	37	Columbus
Walker, Edward N	96	26+4	Flushing

MINING—11

	Course Hours.	Credit Hours.	
Alkins, Albert E	91	27+4	Wayne, Pa
Anderson, Arthur	91	86+18	Shawnee
Bohm, Oscar Herman	92	42+5	Cleveland
Evans, Charles Hopkins	92	10	Evanston
Harrigan, Archer	92	40	New Castle, Pa
Harrigan, Patrick	91	89+3	Darlington, Pa
Heaton, Marion Timer	92	35	Vigo
Higgins, George E	92	18+5	Columbus
Neale, Arthur	91	78	Monarch
Partridge, Bert Mitchell	92	20	Flint
Sigrist, Charles Ferdinand	92	15	Congress

COLLEGE OF LAW

FIRST YEAR—60

Adams, Judson J Dresden
Addison, Arthur Everet, B. Ph Columbus
Addison, Clarence Maywood, B. Ph Columbus
Arnold, Harry Crumley Columbus
Benedict, Charles Yeddo Mansfield
Bininger, James Wolfgong Lancaster
Brumbaugh, Robert Nevin Dayton
Cook, Van C., B. S. (Hiram College) Syracuse, Kans
Crawford, William Harry Massillon
Dalzell, Raymond Shepard
Darby, Roscoe Bryant Wauseon
DeWitt, Claude B Sandusky
Downing, Earl Summerville Middleport
Du Bois, Aaron Smock Franklin
Evans, Edwin Brown Troy
Farnham, Harry Rathburn Edgerton
Field, George Alexander Ashtabula
Forsythe, John Lewis Cumberland
Friedlich, Alfred Troy
Goddard, Edwin Newell Ashtabula
Gregg, William Brough Bradner
Guitteau, William Backus Toledo
Holland, Edward Leo London

Hoover, Fred R.....Quincy
Hughes, James Clare.....Piqua
Jones, Bertram George.....Columbus
Jones, John Howard.....Granville
Kingsbury, Nathan Corning.....Columbus
Lane, Quinton R.....Canal Winchester
Lathem, Chester H.....Columbus
Leslie, John O'Neil.....Warren
Malone, Francis Eastman.....Conneaut
Mattingly, Herbert Howard.....Celina
Mays, James Wesley, B. Ph.....South Point
Morris, Ingle Alman.....Columbus
Mullamy, James Jackson.....Columbus
Murphy, Frank Hayes.....New Comerstown
McCleary, Clayton Asa, B. Ph. (Franklin College).....Science Hill
McClure, Robert Edward.....Dayton
McCray, Thomas Yates, Jr.....Mansfield
Nicholas, William Renfrew.....Columbus
Nicola, Benjamin Di.....Barnhill
Oldham, Jay Leslie.....Springfield
Peck, Foreman Jacob.....Clarksburg
Rankin, Walter Scott.....Columbus
Reeves, Claude John.....Columbus
Rightmire, George Washington, B. Ph.....Wheelersburg
Robinson, Charles Grier, A. B. (Green Springs Academy).....Rockaway
Sharp, James Rice.....Columbus
Southworth, Ferdinand Leek.....Alliance
Steele, Sherman, B. L. (Notre Dame).....Columbus
Taylor, Everett Buren.....New Albany
Voegele, William Frederick, Jr.....Mansfield
Watkins, Howard Rice.....Blanchester
Wertz, Edward Sleeser.....Dalton
Wheeler, Newberry William, Jr.....Portland
Williams, Lloyd Thomas, B. Ph.....Jackson
Wood, Edward Franklin.....Hadley, Ind
Wright, Burr Roscoe, B. Ph.....Peebles
Yockey, Paul B., B. A.....Columbus

SECOND YEAR—44

Allen, Edward Harrison, A. B. (Harvard University).....Lena
Archer, Benjamin Tone.....Cincinnati
Austin, John Gustave, S. B. (Ohio Normal University).....Sparta
Ball, George Gaylord.....Columbus
Barrere, George Nelson.....Columbus
Bond, Charles Grosvenor.....Columbus
Brewer, Charles Reed.....Bowling Green
Brewer, Claude Leon.....Columbus
Dille, Charles Wallace.....Nottingham
Doup, Henry Harris.....Democracy
Dungan, Lewis.....Jackson
Emmerling, John Valentine.....Wauseon
Flory, Charles Louis.....Newark

Foster, Israel Moore.....Athens
Game, Reed Haskell.....Canal Winchester
Godown, Joseph A.....Hilliards
Gross, Charles John.....Dayton
Gruen, Frank William.....Columbus
Hough, Benson Walker.....Delaware
Lacey, Emmet.....Columbus
Mauck, Earl Wayland.....Kyger
Milligan, Charles Clinton.....Guadenhutten
Minshall, William Edwin.....Chillicothe
McCoy, Frank Lewis.....Salineville
McKemy, Harry Glenn.....Dayton
McLaughlin, Charles Albert.....Bellefontaine
Orton, Walter Edwin.....Williamstown, Mass
Outhwaite, Singleton Peabody.....Columbus
Pease, Edward Livingston, A. B.....Columbus
Postlewait, Neal, A. B. (Northern Indiana University).....Valier, Pa
Price, Thomas Daniel.....New Straitsville
Purpus, Theodore Jacob.....New Bremen
Schlesinger, Hugo Nathan.....Xenia
Smith, Warren Lee.....Columbus
Sprague, Charles Franklin, B. A.....Wapakoneta
Strecker, George William.....Marietta
Street, Herman, Jr.....Columbus
Stough, Luther Bertraud.....Bellefontaine
Stubbs, Isaac Ellsworth.....Pugh
Weaver, David Sherman.....Columbus
Weidling, Carl Phillip.....Tiffin
Welsh, Harford Burnette.....Columbus
Westcott, Rufus Austin.....Grigg's Corners
Wildermuth, Andrew LeRoy.....Columbus

THIRD YEAR—44

Appleby, Calvin William.....Conneaut
Baker, James Burt, Ph. M. (Mt. Hope College).....Salem
Baker, John Ezra, B. A.....St. Paris
Beem, Chapin Burtin.....Jersey
Bell, Harry Almer.....Bloomingdale
Bock, Harrison William.....Canton
Callender, Sherman Delivan.....Hartsgrove
Carson, Samuel George.....Lordstown
Chittenden, Campbell Mithoff.....Columbus
Crowley, Patrick Andrew.....Columbus
Dakin, William Clarence.....Sabina
Denbow, Alonzo Carlton.....Beallsville
Dice, Jesse P.....Akron
Fenner, Jesse Albertus, B. A. (Wittenberg College).....Shiloh
Garst, William Augustus.....Westerville
Gorman, John Michael.....Defiance
Griffiths, Benjamin Lincoln.....Vaughnsville
Hamilton, Orwell William.....Locust Grove
Heacock, William Preston.....Cardington
Hovey, Clark Samuel, A. B. (Buchtel College).....Akron

Keenan, Eli E Quaker City
Keller, Charles Artemus... Kenton
Krumm, Charles, S. M., B. Ph..... Columbus
Layton, Verne Duraud..... Wapakoneta
Longbrake, Arthur Clyde..... Marysville
Loomis, John Cooper..... Tiffin
Mallory, Austin Garwood..... Clarington
Marshall, Charles Cracraft..... Sidney
Mendenhall, Eugene Warren..... Columbus
Merrill, Charles Wesley..... Granville
Middleswart, Clarence Coulter Constitution
Monsarrat, Norton Slaughter Columbus
Morgan, Eugene... New Lexington
Mull, Bert La Forrest, B. A. (Ohio Wesleyan)..... Columbus
Nevin, Charles Borland. Dayton
Patchin, Rufus Harry..... Chardon
Price, George Roger..... Greenfield
Pryor, Charles Foster..... Barnesville
Riegle, Vernon Milton..... Cedar Hill
Sinks, Frederick Nicholas..... Columbus
Smith, Edward Trevitt..... Holden, Mo.
Sykes, William Edgar..... Clarington
Ward, John Franklin..... New Lexington
Wilcox, McAllister..... Sunbury

COLLEGE OF PHARMACY

GRADUATE STUDENTS—1

Stump, William Lisle, G. Ph..... Nashport

FOUR YEAR COURSE—13

	Course Hours.	Credit Hours.	
Bancroft, Norman Ray.....	†	62	Columbus
Bowen, Charles Flood.....	206	84	Columbus
Burt, Charles Conaway.....	206	36	Coshocton
Canfield, Delos Wilford, Jr.....	206	65	Columbus
*Dunlap, Carl Reed.....	206	28	Columbus
Holloway, David Frank.....	206	82	Middletown
Huff, George Harry	206	97	Middletown
Kimberly, Charles Hubbell.....	206	83+24	North Fairfield
*Koons, Mary Royston.....	206	97	McConnelsville
Landacre, Walter Alexander.....	206	24	Columbus
*Peck, James Francis.....	206	34	Columbus
Sweet, Fred Watson.....	†	120	Columbus
Wagstaff, Harry Garfield.....	206	30+5	Niles

*Preparatory work incomplete.
†Irregular—not candidates for degree.

THREE YEAR COURSE—6

Bunnell, Larone Allen.....Waynesville
Calkins, William Bartlett.....Columbus
Logsdon, Clement Jay.....Columbus
Moss, William.....Buffalo
Smith, Clarence Elmer.....West Brookfield
Somermeir, Edward Everett.....Westwood

SHORT COURSE—37

	Course Hours.	Credit Hours.	
Barrick, Alfred Asberry	112	107+8	Columbus
Bevard, Eva Gertrude	112	45+51	Columbus
Bradshaw, Harry James	112	90+13	Columbus
Burr, Frank Henry	112	77+10	Columbus
Casper, John Fry	112	48	Springfield
Clelland, Franklin Pierce	112	35	Lockville
Culbertson, Claude Lanier	112	112+2	Zanesville
Day, Clayton Miller	112	55	Blanchester
Fisher, Perry Wallace	112	43	Wooster
Flinn, Eayre David	112	10	Sidney
Foster, George Gruel	112	18	Columbus
Freedman, Daisy	112	45+9	Jackson
Funk, Roy W.	112	73	Chesterhill
Furnas, Joseph Morrill	112	...	Columbus
Graner, Carl	112	102+5	Oak Harbor
Helmick, Maynard E. J.	112	13	Commercial Point
Hyde, Cyrus Olin	112	63+3	Columbus
Jewell, Frank Emerson	112	...	Cardington
Johnson, William Noel	112	53	Piqua
Kerr, Franklin Pierce, Jr.	112	60	Columbus
Kunkel, Charles J.	112	3	Columbus
Lallance, Leroy Armstrong, Jr.	112	28	Wheeling, W. Va.
Lane, Eldon Earl	112	8	Columbus
Moore, Rodney Downing	112	112+14	Chardon
Morris, Harry Long	112	110	Springfield
McCann, Frank Hyacinth	112	82	Junction City
Naddy, Charles Joseph	112	43	Columbus
Oglesby, Nicholas Perkins	112	88+6	Lucretia, Va.
Oshe, Carl Magnus	112	85+2	Zanesville
Potter, Lewis Hall	112	75+6	Columbus
Rostofer, Freeman Allen	112	53	Pataskala
Sandoe, De Nevin	112	38+2	Columbus
Schilling, Robert Wilson	112	107	Jewett
Sellenings, Oscar	112	37+2	Chillicothe
Sovacool, Harry Grove	112	61	Columbus
Stephens, William Emery	112	98	Barnesville
Umberger, Lee	112	33	Wytheville, Va.

COLLEGE OF VETERINARY MEDICINE

GRADUATE STUDENTS—2

Boyd, James Grant, D. V. M. Columbus
Frederick, Charles Byron, V. M. & S. (Ontario College) Louisville

UNDERGRADUATES—15

	Course Hours.	Credit Hours.	
Cook, Charles Albert	177	...	Williamsport
Delaney, Frank	177	62	Van Wert
Detchon, Aubrey Bloxson	178	116	Youngstown
Eddy, William	177	57	East Cleveland
*Goddard, Harford Bishop	178	80+25	Dunham
*Griffin, Frank	177	49	Columbus
Hammond, Harry James	177	54	Sharon Center
Johnson, Theodore Charlemagne	177	44	Akron
*Moorehead, Robert Henderson	177	33+3	Zanesville
*Morrow, Charles James	177	54	Tiro
*McClelland, Robert Lyle	177	54	Andover
*Nunamacher, Norman C	177	36	Louisville
*Smith, Harry Milton	†	60+22	East Liverpool
*Sparhawk, William Theron	178	126	Tallmadge
Worcester, Warner	178	151	Columbus

SUMMER SCHOOL—80

1897

Aird, Grace Mary Springfield
Arnold, Edwin Ebert Zanesville
Behren, Lillian Columbus
Bently, Irma Columbus
Booth, Cora V. Columbus
Brooks, Faith Columbus
Brown, Harold Warner Columbus
Burgess, James Henry Big Horn, Wyo.
Classon, Clayton D. Galena
Claypoole, Charlotte Lake Columbus
Clymer, Jeremiah B. Mt. Vernon
Connell, Laura Jewell Columbus
Crable, Arthur Columbus
Davis, William E. Columbus
Deeter, Lillian Covington
Doan, Frank Carleton Nelsonville
Dufour, Alice Columbus
Field, Frank William Mt. Vernon

* Preparatory work incomplete.
† Irregular—not candidate for degree.

Foulke, Alice Elizabeth.....Urbana
Fries, Albert Conrad.....Grove City
Gilmore, William Henry.....Millersport
Gladden, Alice.....Columbus
Goodell, Alice B.....Columbus
Goodwin, May.....Kendallville, Ind.
Graham, Leonard Johnson.....New Concord
Green, Homer S.....Raymond
Haig, Mary.....Columbus
Hammond, Bessie.....Columbus
Hare, Alice D.....Columbus
Harward, Arthur B.....Gahanna
Herd, Emma A.....Raymond
Huffman, J, Ross.....Attica
Jones, Grace Lattimer.....Columbus
Judd, Edith May.....Columbus
Kanmacher, Herbert Lee.....Columbus
Kauffman, Henrietta C.....Columbus
Kauffman, Margaret Glenn.....Columbus
Kelley, Alice Matilda.....Kelley's Island
Kirby, Harriet R.....Columbus
Lane, Fulton.....Columbus
Miner, Cora Alnetta.....Columbus
McElroy, Riley Park.....Defiance
Nevin, Ella C.....Columbus
Nida, William Lewis.....Lincoln
Oldham, Jay L.....Springfield
Osborn, Frank C.....Columbus
Osborn, Liphe.....Columbus
Palmer, Elmer Bennett.....Columbus
Peppel, Samuel Vernon.....Leetonia
Peters, Grace.....Columbus
Pettit, Joseph Emery.....New London
Powell, Blanche.....Mt. Cory
Pumphrey, J. Homer.....Clayton
Raymond, Maybelle.....Columbus
Richardson, W. H.....Holgate
Rickrich, Kate C.....Newark
Roberts, Mary.....Springfield
Rockwell, Mary Fannie.....Columbus
Rodenfels, Katharine.....Columbus
Rogers, Rutherford Hayes.....Columbus
Sandoe, De Nevin.....Columbus
Sessions, Elizabeth.....Columbus
Shoemaker, Carrie O.....Columbus
Skinner, Eleanor.....Columbus
Smith, Anna M.....Columbus
Smith, James Oliver.....Columbus
Smith, R. B.....Ripley
Starrett, Amy B.....Columbus
Stewart, Gilbert H., Jr.....Columbus
Stocks, Herbert.....Gambier
Sweeney, Paul L.....Columbus
Travis, John Francis.....Green Camp

Voke, Cora.....Columbus
Weaver, Edward Sheridan.....Leipsic
Wilson, Stella S.....Columbus
Wommelsdorff, Clara.....Sandusky
Wommelsdorff, Ella.....Sandusky
Wood, Lillian J.....Columbus
Woolford, C. E.....Trenton
Zartman, Ray V.....Columbus

PEDAGOGICAL CONFERENCE—51

1897

Aberle, Mary.....Mansfield
Bainter, Effie L.....Columbus
Bancroft, Harriet.....Columbus
Barrett, Charles Sumner.....Columbus
Brown, Marshall Adelbert.....New Madison
Bunker, Adelaide.....Columbus
Carrick, Charles M.....Wauseon
Corns, Harry.....Columbus
Corson, Oliver T.....Columbus
Coursault, Jesse H.....Columbus
Criswell, Emma G.....Columbus
Deeter, Lillian.....Covington
DeLong, George Washington.....Corning
Doan, Frank Carlton.....Nelsonville
Evans, Sally.....Alton
Farlow, Aarcha.....Barlow
Fellows, Ada J.....Columbus
Fickell, Henry Craig.....Edison
Flynn, Oscar R.....Columbus
Fowler, James Celwin.....New Lexington
Garner, Clara.....Columbus
Goodall, Alice.....Columbus
Hall, Jeannette.....Columbus
Henson, Morris A.....McArthur
Hoffhines, Frank J.....Columbus
Housel, Florence.....Mansfield
Huffman, J. Ross.....Attica
Hutcheson, Mary E.....Columbus
Lazarus, Harriet J.....Columbus
Long, John A.....Chillicothe
Millay, Helen.....Columbus
McCloud, Emma.....Columbus
McClure, Charles W.....Oxford
Neereamer, Cora.....Columbus
Osgood, Anna M.....Columbus
Peters, Alice.....Columbus
Powell, Blanch.....Mt. Cory
Powers, Milo Carl.....Port Williams

Ruess, Bertha Mansfield
Sells, Ida Dublin
Sheppard, Leander William Columbus
Shoemaker, Carrie O Columbus
Snay, Maud E Columbus
Starr, Lila Columbus
Stephens, Ada Columbus
Sutherland, Margaret W Columbus
Warner, Ellis Fulton Bellevue
Wilmot, Elnor H Columbus
Wood, Lillian J Columbus
Wood, Verlinda S Columbus
Woolford, Charles Edwards Trenton

GENERAL SUMMARY

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE—

Graduate Students	3	
Four-year Courses	68	
Short Course in Agriculture	41	
Short Course in Domestic Science	3	
Dairying	29	144

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE—

Graduate Students	24	
Four-year Courses	324	
Course Preparatory to Law and to Journalism	30	
Course Preparatory to the Study of Medicine	9	387

COLLEGE OF ENGINEERING—

Graduate Students	2	
Four-year Courses	264	
Architecture	11	
Ceramics	12	
Mining	11	
Industrial Arts	2	302

COLLEGE OF LAW—

First Year	60	
Second Year	44	
Third Year	44	148

COLLEGE OF PHARMACY—

Graduate Student	1	
Three-year Course	6	
Four-year Course	13	
Short Course	37	57

COLLEGE OF VETERINARY MEDICINE—

Graduate Students	2	
Undergraduates	15	17
Summer School, 1897		80
Pedagogical Conference, 1897		51
Total		1,186

Names counted twice	36
Net total	1,150

SUMMARY BY COUNTIES.

Adams	3	Hamilton	7	Noble	1
Allen	3	Hancock	5	Ottawa	2
Ashland	3	Hardin	6	Perry	
Ashtabula	17	Harrison	5	Pickaway	6
Athens	5	Henry	5	Pike	1
Auglaize	10	Highland	5	Portage	8
Belmont	11	Holmes	2	Preble	3
Brown	4	Huron	7	Putnam	6
Butler	12	Jackson	10	Richland	16
Champaign	12	Jefferson	8	Ross	10
Clark	12	Knox	18	Sandusky	2
Clermont	4	Lake	1	Scioto	8
Clinton	9	Lawrence	5	Seneca	5
Columbiana	12	Licking	13	Shelby	3
Coshocton	3	Logan	8	Stark	16
Crawford	2	Lorain	9	Summit	6
Cuyahoga	5	Lucas	8	Trumbull	6
Darke	4	Madison	6	Tuscarawas	8
Defiance	5	Mahoning	6	Union	16
Delaware	4	Marion	4	Van Wert	2
Erie	18	Medina	7	Vinton	2
Fairfield	13	Meigs	7	Warren	4
Fayette	7	Mercer	1	Washington	7
*Franklin	480	Miami	23	Wayne	11
Fulton	7	Monroe	3	Williams	1
Gallia	6	Montgomery	28	Wood	3
Geauga	4	Morgan	5	Wyandot	3
Greene	7	Morrow	5		
Guernsey	6	Muskingum	24		

SUMMARY BY STATES AND COUNTRIES

(As far as known.)

Bulgaria	1	Massachusetts	1	Ohio	1089
Colorado	1	Michigan	1	Pennsylvania	8
Georgia	2	Missouri	4	South Carolina	2
Illinois	8	Nebraska	1	Texas	3
Indiana	5	New Jersey	2	Virginia	5
Kansas	2	New Mexico	1	Washington D. C.	1
Kentucky	1	New York	3	West Virginia	4
Maryland	2	North Carolina	1	Wyoming	3

*Nearly forty-two per cent. of the students registered from Franklin county are those whose homes are at Columbus only during their University course.

GRADUATES

Graduates

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor if any alumnus who changes his residence will notify the Executive Office of his new address and occupation. They will also be grateful for any information from any source, that may assist in making or keeping the Directory of the Alumni complete and correct.

ALUMNI ASSOCIATION

OFFICERS FOR 1898–99

EMILIUS OVIATT RANDALL, '92, Columbus.....*President*
MRS. WILBUR H. SIEBERT, '84, Columbus*Vice-President*
JOHN A. BOWNOCKER, '89, Columbus.....*Secretary*
FRANK A. RAYMOND, '88, Columbus.....*Treasurer*
ALBERTA D. GARBER, '89, Boston, Mass*Orator*
JOSEPH S. MYERS, '87, Pittsburg, Pa*Alternate*

COMMITTEE ON COLLEGE AFFAIRS

SCOTT ANDERSON WEBB, '88, Columbus..... Term expires 1899
WALTER I. SEARS, '94, Chillicothe " 1900
FLORIZEL SMITH, '80, Columbus " 1901
MRS. HARRY J. ABBOTT, '93, Columbus " 1902
LORING HAPGOOD GODDARD, '92, Sullivan, Ind..... " 1903

COMMITTEE ON NECROLOGY

GEORGE S. MARSHALL, '94, Columbus Term expires 1899
WILBY G. HYDE, '87, Chillicothe " 1900
LOWRY F. SATER, '95, Columbus..... " 1901

Directory.

A

Ackerman, Eli Osborn, 1884, C. E., 2664 North High street, Columbus, Columbus Street Railway Co.
Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.
Addison, Arthur Evert, 1895, B. Ph., Columbus, teacher South High School.
Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.
Addison, Clarence Maywood, 1896, B. Ph., Columbus, teacher Central High School.
Agler, Eulalia, 1895, G. Ph., Columbus, with Columbus Pharmical Company.
Albert, Louisa Mary, 1896, G. Ph., Mrs. A. E. Vinson, Columbus.
Aldrich, Chester H., 1888, B. A., LL. B., David City, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Fairmont, W. Va., electrician with Light and Power Co.
Alexander, St. Clair, 1893, M. E. in EE., Bridgeport.
Alexander, Charles P., 1896, M. E. in E. E., Letart Falls, teacher of science.
Allaman, William Ernest, 1896, G. Ph., Brookville.
Allen, Lucy, 1897, B. A., Columbus, library assistant, State University.
Alsdorf, Percy Reed, 1896, E. M., Central City, Col., Standard Assay office.
Alsdorf, Frederick Charles, 1892, E. M., Central City, Col., general manager, DuQuesne Mining Co.
Alspach, Rufus Edwin, 1897, M. A., (B. A. Heidelberg), Thornville.
Anderson, James T., 1884, B. A., Colorado Springs, Col., 1st Lieutenant U. S. Army.
Anderson, Newton M., 1879, B. Sc., Principal of the University School, Cleveland.
Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S., Ohio Wesleyan University), Zanesville.
Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.
Armstrong, Edna, 1897, B. Ph., Columbus.
Armstrong, William H., 1890, G. Ph., Marysville, druggist.
Arnold, Charles Lincoln, 1890, B. Sc., 1884, M. Sc., West Eighth ave., Columbus, assistant in mathematics, State University.
Arnold, Edwin E., 1898, M. E., Zanesville.
Atkins, G. Glenn, 1888, B. A., Greenfield, Mass., pastor Congregational Church.
Auld, James A., 1897, M. E. in E. E., Columbus.

B

Bachtell, Nellie May, 1895, B. A., New London, teacher.
Backhaus, Henry Ward, 1894, B. A., St. Mary's.
Baer, Philip, Jr., 1897, B. Sc., (Agr.) Gratiot, Creamery operator.
Bagley, Anna Gertrude, 1894, G. Ph., Columbus.
Baker, James Burt, 1898, LL. B., Salem.
Baker, John Ezra, 1897, B. A., 1898, LL. B., St. Paris.

Baker, William Hollister, 1892, B. Agr., Farmersville, Mo., farmer and stock raiser.
Baldwin, Zoa Belle, 1896, B. A., Prospect, teacher in High School.
Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus, Fellow in Mathematics State University.
Ball, Fred S., 1888, B. Ph., Montgomery, Ala., attorney-at-law.
Bancroft, Gay, 1898, B. A., Columbus.
Barcus, Miner, 1897, M. E. in E. E., Schenectady, N. Y., General Electric Co.
Barlow, Helen M., 1898, B. Ph., Columbus.
Barnaby, Charles L., 1898, C. E., Columbus.
Barnaby, Josephine, 1896, B. Ph., Warren, teacher.
Barrows, Harry Holbrooke, 1898, C. E., Lexington, Ky., engineer on Queen & Crescent Ry.
Bartholomew, Clyde Stanley, 1896, C. E., Newark, civil engineer, B. & O. Ry.
Basterdes, Ada Mabel, 1890, B. Ph., Plano, Ill., teacher in High School.
Bates, Josephine M., 1881, B. Ph., Mrs. Florizel Smith, Columbus.
Bates, Wesley C., 1882, LL. B., 35½ N. High street, Columbus, attorney.
Baughman, George W., 1897, G. Ph., Leipsic.
Beach, David Price, 1895, C. E., Pittsburg, Pa., in employ of Pennsylvania Railroad.
Beach, Margaret Alice, 1891, B. Ph., (Mrs. Wilson Holman), Bayonne, N. J.
Beardsley, Orsamus D., 1898, B. Ph., Garrettsville.
Beattie, William Renick, 1894, B. Sc., 1897, M. Sc., (in Horticulture), Columbus agent for typewriters' supplies.
Beck, Arthur Andrew, 1893, C. E., Columbus, county surveyor's office.
Belden, Sanford Bonner, 1895, E. M., Chicago, Ill., with Chicago Electric Mining Engineering Co.
Bell, Mary Edith, 1894, B. Ph., St. Paul, Minn., teacher in High School.
Bennett, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill., attorney-at-law.
Bennett, Samuel E., 1890, D. V. M., Kansas City, Mo., Gov't Meat Inspector.
Bently, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College), 15 Miller Road, Shanghai, China, missionary.
Bertsch, Joseph Franz, 1896, LL. B., Columbus.
Bibbee, George E., 1897, LL. B. (A. B. Ohio Wesleyan University), Columbus.
Biebel, Herman Matthews, 1896, M. E. in E. E., Chicago, Ill., electrician with Western Electric Co.
Bissing, William, 1893, M. E. in E. E., Washington, D. C., patent office.
Blackburn, Frank H., 1896, M. E. in E. E., Tres Piedras, N. M., Supt. Buckeye Mica Mining Co.
Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.
Blakiston, Anna Houston, 1897, B. Ph., (Mrs. Powell) Pittsburgh, Pa.
Blakiston, Mary, 1893, B. Ph., Columbus, teacher in South High School.
Blinn, Ray S., 1893, B. S.
*Bloom, Edwin M., 1893, B. Sc., died, 1894.
Bloom, J. George, 1889, C. E., Cincinnati, assistant engineer, B. and O. S. W. R'y.
Bloomfield, Lloyd Morris, 1891, B. Agr., Wooster.
Bock, Harrison W., 1898, LL. B., Canton.
Bodman, Mary E., 1898, B. Ph., Bement, Ill.
Boesche, Felix John, 1896, G. Ph., New Bremen.
Boesel, Frank Tilden, 1896, B. Ph., student, Harvard Law School.
Bogue, Ernest Everett, 1894, B. Sc. H. & F., 1896, M. Sc., Professor of Botany and Horticulture, Agricultural and Mechanical College, Norma, Okla.
Bone, John H., 1893, B. Sc.; 1896, B. Sc. (Agr.), assistant in Agriculture, Agricultural and Mechanical College, Norma, Okla.
Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D., Columbus.
Bope, George W., 1897, LL. B., Columbus.

Bower, Jerome G., 1897, M. E., Waynesburg, Pa.
Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, assistant professor in geology, State University.
Boyd, Emma, 1888, B. Ph., 38 W. Woodruff ave., Columbus, teacher in the North High School.
Boyd, James G., 1897, D. V. M., Columbus.
Boyd, James Ellsworth, 1891, B. Sc., Columbus, assistant professor of Physics, State University.
Boyd, Martin L., 1897, LL. B., Columbus.
Bradford, Ernst, 1892, G. Ph., S. Garfield ave., Columbus, chemist.
Bradford, Joseph Nelson, 1883, M. E., 54 West Tenth avenue, Columbus, associate professor of drawing, State University.
Brand, Harry Frank, 1896, B. Ph., 1897, LL. B., Worthington.
Brandt, Ulysses Sherman, 1895, B. A., Canal Winchester, superintendent schools.
Braun, Joseph G., 1897, G. Ph., Columbus.
Brelsford, Harley, 1898, B. Ph., Christiansburg.
Brewer, John Whitney, 1896, G. Ph., Columbus.
Britton, John Carr, 1898, B. Sc. (Agr.), Columbus.
Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary surgeon.
Bronson, Herman S., 1897, LL. B. (B. L., Cornell University), Columbus, attorney.
Brown, Frederick W., 1888, E. M., Bellefontaine, superintendent Buckeye Portland Cement Co.
Brown, Newton H., 1893, M. E. in E. E., assistant in Physics, Ohio State University.
Bruce, Charles A., 1895, B. A., Columbus, Paris, student.
Brumley, David Joseph, 1895, C. E. Evansville, Ind., with L. & N. R'y.
Bruning, Henry Dietrick, 1896, C. E. Pittsburg, Pa.—engineer on P., C. C. & St. L. R. R.
Buckman, Arthur Leslie, 1897, M. E. in E. E., Dixon, Ill., assistant state telegraph inspector.
Buckman, Ola, 1895, B. Sc., (M. D. Cleveland University of Medicine and Surgery), Norwalk.
Bunnell, Larone A., 1898, G. Ph., Waynesville.
Burkett, Charles William, 1895, B. Sc. (Agr.), 1898, M. Sc. (Agr.), Durham, N. H., associate professor of Agriculture, New Hampshire State College.
Burkett, Dora Van Buren, 1897, B. Ph., Columbus.
Burns, James Ferguson, 1891, C. E., Hopkinsville, Ky., assistant engineer L. & N. Ry.
Burr, Harriett G., 1897, B. A. Worthington.
Butler, James Marion, 1894, LL. B, (A. B., Ohio Wesleyan University), Carmel.
Butterworth, William H., 1898, B. A., Columbus.
Byers, Clara, 1894, B. Ph., (Mrs. Coles A. Raymond), Youngstown. O.

C

Cahen, Alfred, 1894, LL. B., Allegheny, Pa.
Calkins, George Herbert, 1895, M. E. in E. E., Columbus.
Calkins, William Bartlett, 1898, G. Ph, Columbus.
Callender, Sherman D. Ph. B. (Oberlin College), 1898, LL. B., 326-330, The Nasby, Toledo, attorney.
Canfield, Charles H., 1897, D. V. M., Akron.
Canfield, Leander Randall, 1896, B. Ph., Chardon.
Capron, Marshall Fremont, 1888, M. E., Kenton, architect.
Carr, Hugh Stanley, 1896, M. E., in E. E., Sandusky, Warren Electric Mfg. Co.
Carr, James Gray, 1897, B. A. Coshocton.
Carroll, Patrick Henry, 1894, E. M., Houtzdale, Pa.
Carroll, William Hunt, 1894, LL. B., Wilmington.

Carson, Samuel King, 1895, M. E. in E. E., Columbus, student, Ohio Medical University.
Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant.
Catlin, Homer Clark, 1896, C. E., Toledo, Toledo Bridge Co.
Canaga, George Orlando, 1895, LL. B. (B. A., Scio College).
Cartwright, Henry Gilroy, 1895, LL. B.
Cellarius, Frederick Julius, 1888, C. E., Dayton, civil engineer.
Chamberlain, Helena W., 1884, B. A., Mrs. Ellis Lovejoy, Union Furnace.
Chalmers, Agnes Florida, 1895, B. Ph., Bay City, Mich., teacher in High School.
Chappell, Walter Evans, 1898, M. E., in E. E., Brooklyn, N. Y., Ensign U. S. S. Vermont Navy Yard.
Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.
Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician.
Cilley, Raymond, 1896, C. E., Cincinnati.
Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.
Claypoole, Bessie Smith, 1895, B. Ph., Columbus, student.
Claypoole, Charlotte Lake, 1892, B. Ph., Columbus, North High street.
Clum, George V., 1893, B. A., Mendota, Ill., president of Mendota College.
Cockins, Edith D., 1894, Columbus, Registrar, State University.
Coddington, Edwin F., 1896, C. E., 1897, M. Sc., fellow in Astronomy, Lick Observatory, Mount Hamilton, California.
Cole, George Nathan, 1891, M. E. in E. E., Chicago, Ill.
Cole, Marietta C., 1897, B. Ph., Columbus.
Collins, Curtis, 1895, M. E., in E. E., Boston, Mass., General Electric Co.
Coney, William Hawks, 1894, B. Sc., Honolulu, S. I.
Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German.
Connell, William A., 1886, E. M., Kansas City, Mo., teacher, Manual Training School.
Converse, Edward Joseph, 1886, B. A., (B. D., Yale University), Columbus, Ass't pastor, First Congregational Church.
Converse, Howard Pendleton, 1887, B. Sc., 166 Devonshire street, Boston, Mass. manager Boston office Cooper, Hewitt & Co., steel and iron manufactures.
Conway, Hugh Lawrence, 1896, C. E., Springfield.
Cope, Albert N., 1897, M. E. in E. E., Columbus, electrician with Columbus Street R. R.
Corner, Florence, 1897, B. Ph., Columbus.
Corns, Harry, 1897, B. A., Columbus, teacher in Central High School.
Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law.
Cotes, Albert E., 1897, B. Sc., Columbus Medical student, Ohio Medical University.
Coursault, Jesse H., 1893, B. A., 1898, M. A., Columbus, teacher in Central High School.
Covell, Vernon Royce, 1895, C. E., Pittsburg, Pa., county engineers office.
Craig, Moses, 1899, B. Sc., (M. S., Cornell University, 1890), 1896, M. Sc. (H. & F.), Agricultural and Mechanical College, Corvallis, Oregon.
Cratty, John Mason, 1897, B. Sc., Cincinnati, chemist.
Crawford, Ira, Jr., 1893, LL. B. (B. S., Denison University), Dayton.
Crawford, William Sterling, 1888, B. Ph.
Cromley, Alva M., 1897, G. Ph, Toledo, pharmacist.
Crooks, Charles Melville, 1892, B. A.
Crowner, Delbert Alonzo, 1896, B. Sc., (Agr.), Ohio Experiment Station, Wooster.
Cummins, Henry Rollins, 1891, G. Ph., Hunter street, Columbus.
Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, bookkeeper.
Cunningham, Edward Walter, 1894, C. E., Chicago, Ill., U. S. engineer's office.
Cunningham, George S., 1886, B. Ph., LL. B., Lancaster, attorney-at-law.
Cunningham, John Ferguson, 1897, B. Sc. (H. and F.), Columbus, assistant in Horticulture, State University.

D

Daily, Henry G., 1892, D. V. M., Wooster, veteriuary surgeon.
Damron, Carson W., 1897, M. E., Gallipolis.
Daniels, David Edwin, 1893, LL. B. (B. Ph., Denison University), 1896, LL. M., Columbus.
Davenport, Adrian E., 1897, B. A. Columbus.
Davidson, David Millen, 1894, B. A., law student, Chicago, Ill.
Davies, Jennie C., 1897, B. Ph., Columbus.
Davies, John Lodwick 1894, LL. B., Minneapolis, Minn., attorney-at-law.
Davis, Charles William, 1894, E. M., Colorado Springs, Col., teacher in High School.
Davis, Oscar Allen, 1897, M. E. in E. E., Sistersville, W. Va., electrician, Carter Oil Co.
Deahl, Walter Smith, 1896, C. E., Pittsburgh, Pa.
Deardurff, Carl Mason, 1895, B. A.
DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.
DeLoffre, Andre, 1896, M. E. in E. E., Schenectady, N. Y., General Electric Co.
DeLoffre, Samuel Middleton, 1895, B. A.
Dennis, Jerry, 1892, LL. B., 1893, LL. M., Columbus, attorney-at-law.
Derby, Florence Harlow, 1896, B. Ph., Columbus, graduate student, State University.
Detmers, Fredericka, 1887, B. Sc., 1891, M. Sc., 1215 Neil avenue, Columbus, teacher.
Devol, Willsam Stowe, 1886, B. Agr., Riverside, Cal.
Dice, Jesse Peck, 1898, LL. B., Akron.
Diemer, Hugo, 1896, M. E. in E. E., Westinghouse E. & M. Co.
Dietrich, Charles Henry, 1878, B. Sc., with American Book Co., general manager for Kentucky.
Dietrich, George C., 1898, B. Ph., Piketon.
Doan, Frank C., 1898, B. Ph., Boston, Mass., graduate student, Harvard University.
Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Delaware, pastor M. E. Church.
Donham, Maurice, 1896, M. E., Cincinnati.
Donham, William W., 1882, B. Sc.
Dresbach, Melvin, 1897, B. Sc., Columbus, fellow in physiology, State University.
Dun, George William, 1884, B. Sc., Columbus, business manager, "Columbus Citizen."
Dun, John J., 1883, E. M., Fifteenth avenue, Columbus, consulting engineer.
*Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.
Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.
Dunlap, Thaddeus Cox, 1895, M. E., in E. E., Ensign, U. S. Navy, Battleship Oregon.
Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.
Dunnick, Edward, 1897, C. E., Columbus, New Columbus Bdg. Co.
Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta.
Dye, Clair Albert, 1891, G. Ph., Columbus, assistant professor of pharmacy, State University.

E

Eagleson, Grace, 1897, B. Ph., Columbus.
Early, Franklin E., 1893, D. V. M.
Easterday, Charles Todd, 1891, G. Ph., Wellston, druggist.
Edwards, Mary Winifreda, 1897, B. A., Columbus, student Normal School.
Egbert, Knott C., 1890, B. Agr., Yainax, Oregon, Supt. Indian Boarding School.
Eisenlohr, Berthold A., 1898, B. Ph., Cincinnati.
Ellis, Charles, 1898, D. V. M., 3230, Locust street, St. Louis, Mo., veterinarian.
Emery, Peyton Randolph, 1893, LL. B., London.
Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Cleveland, assistant professor of Latin, Western Reserve University.

Erskine, John H. 1886, E. M., Lowellsville, fire brick manufacturer.
Estep, Frank Leslie, 1898, M. E. in E. E., Beloit, Wis., Asst. Supt. of Lighting Co.
Evans, Ernest, 1892, B. Sc., Mingo Junction, chemist, Laughlin Junction Steel Co.
Evans, Peter Platter, 1892, C. E., Boston, Mass., with King Bridge Co.
Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., Colorado Springs, Col., teacher of chemistry in High School.
Eysenbach, Ernest, 1896, E. M., Columbus, with Columbus Gas Co.

F

Fairchild, Harmon Scott, 1894, LL. B., Springfield.
Farber, Charles Harker, 1894, B. A., Columbus, with State Savings Association.
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., Instructor in Climatology, Johns Hopkins University.
*Fay, Frederick Willis, 1882, B. A., B. Arch., died August, 1892.
Fay, Mona, 1897, B. Ph., (Mrs. Eugene Gee), Pittsburgh, Pa.
Feicht, Russell Stimson, 1890, M. E., in E. E., Philadelphia, Pa., Philadelphia Traction Co.
Feiel, Ida Louise, 1898, B. Ph., Columbus.
Fenner, Jessie Albertus, A. B., (Wittenberg College) 1898, LL. B., Shiloh.
Fergus, Guy Carlton, 1898, M. E in E. E., Zanesville Electrical Contractor.
Fergus, John Franklin, 1892, LL. B. Columbus, attorney-at-law.
Finley, Harry Marshall, 1894, B. A. McConnelsville, principal of High School.
Fischer, Julius H. R. Paul, 1891, B. Agr., D. V. M., professor of veterinary medicine, Manhatten, Kas.
Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898, B. Sc., Columbus, fellow in chemistry State University.
Fischer, Walter, 1897, B. Sc., Columbus.
Fish, Fred Alan, 1898, M. E. in E. E., Columbus, fellow in electrical engineering, State University.
Fisher, Clara, 1886, B. A., Mrs. J. Porter Milligan, Columbus.
Fisher, Georgietta, 1895, B. A.
Fitzgibbon, James Robert, 1894, LL. B., Newark.
Fitterer, John Conrad, 1898, B. Sc., Butler.
Flickinger, George A., 1898, B. Sc., (Agr.) York.
Floto, Julius, 1889, E. M.
Flynn, Benjamin H. 1898, C. E., Columbus, with State Board of Health.
Flynn, Harry Franklin, 1892, C. E., Washington, D. C., U. S. Geodetic and Coast Survey.
Flynn, Maud, 1896, B. Sc., Columbus, student, Columbus Normal School.
Flynn, Oscar Rodgers, 1896, B. Sc., teacher in High School, Columbus.
Foley, William J., 1894, D. V. M., Lexington, Ky.
Ford, Ruth L., 1898, B. A., Ashtabula, teacher in High School.
Ford, Stanley Homer, 1898, B. Ph., Lieut. in U. S. Army.
Forgy, Ralph Morris, 1896, B. Ph , El Paso, Texas.
Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning.
Foster, Frank McMillan, 1894, M. E. in E. E., Madison, Wis., Electric Supply Co.
Foster, Israel Moore, 1898, LL. B , Athens.
Foulk, Charles William, 1894. B. A., assistant in chemistry, State University.
Fowler, Harry R., 1894, M. E. in E. E., Toledo, Electrical Contractor.
Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Columbus, fellow in botany, State University.
Fox, Frederick Hugh, 1896, B. Ph., McConnelsville.
Fox, John Herbert, 1897, M. E., Cleveland, Brown, Hoisting Machine Co.
Francis, Edward, 1894, B. Sc., Cincinnati, interne, Cincinnati Hospital.

Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of veterinary medicine, Agricultural and Mechanical College.
Fravel, George B., 1888, M. E., Indianapolis, Ind., assistant master mechanic, Pan Handle shops.
Frayer, Lee Ambrose, 1896, M. E., Greenwich.
Freeman, Stanton Sholes, 1898, E. M., Columbus.
French, Thomas Ewing, 1895, M. E., Columbus, assistant in drawing, State University.
Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.
Fulmer, Edward L., 1897, B. Sc., 1898, M. Sc., Columbus, graduate student, State University.
Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.

G

Gains, Charles E., 1889, B. Ph., London, physician.
Galbraithe, John Howard, 1883, B. Ph., Oak street, Columbus, journalist.
Gale, Cora C., 1893, B. Ph., Columbus.
Gale, Franklin Henry, 1893, LL. M. (LL. B., University of Michigan), Columbus.
Gallen, William Francis, 1897, M. E., Columbus.
Game, Reed Haskell, 1896, B. Ph., student in College of Law, State University.
Garber, Alberta D., 1889, B. Ph., A. M., Boston, Mass.
Garber, John Murray, 1897, C. E., Columbus, New Columbus Bdg. Co.
Garber, Levi L., 1898, B. A., Belleville.
Garst, William Augustus, A. B., (Otterbein University and Harvard University), 1898, LL. B., Westerville.
Gee, Eugene C., 1897, M. E. in E. E., Pittsburg, Pa.
Gehrkens, Edward Frederick, 1894, M. E. in E. E., Schenectady, N. Y., with General Electric Co.
Geissinger, James Allen, 1895, B. A., Cincinnati.
Genheimer, Eli Thomas, 1896, B. Ph., Portsmouth, teacher in High School.
Genheimer, William F., 1897, LL. B., Portsmouth, attorney.
Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.
Given, James Byron, 1896, M. E. in E. E., 224, 22d St., Chicago, Ill., President, Given Supply Co.
Givens, Newton Edgar, A. B., 1896, LL. B., Waverly.
Glover, Sioux, 1882, B. Sc., Mrs. Horton, Errid, Pa.
Goddard, Loring Hapgood, 1892, C. E., Sullivan, Ind., farmer.
Goodell, Ralph Spencer, 1892, C. E., Columbus, draughtsman, New Columbus Bridge Co.
Goodman, Joseph Clarence, 1896, LL. M., Columbus.
Goodman, Sylvester Jacob, 1896, G. Ph., Columbus, student, Ohio Medical University.
Gordon, Adelaide Cummins, 1896, B. Ph., Columbus.
Graham, Emery Eugene, 1898, M. E. in E. E., Chicago, Ill., Western Electric Co.
Grandle, Frank Albert, 1891, G. Ph.
Grate, Charles Artemis, 1898, M. E., Yale.
Graves, William L., 1893, B. A., 1897, M. A., assistant professor in Rhetoric, State University.
Gray, Genevieve, 1898, B. Ph., Columbus.
Gray, James Collam, 1892, LL. B., 1893, LL. M., Pittsburg, Pa., attorney P. R. R'y.
Green, Charles C., 1885, B. Sc., M. D., Beaver City, Neb., physician.
Green, Jerome Joseph, 1893, M. E. in E. E., South Bend, Ind., Notre Dame University, professor in charge of electrical department.

Green, Robert Lee, 1892, G. Ph.
Gregg, Frank B., 1889, B. Ph., M. D.
Gregory, Hiram D., 1880, E. M., attorney-at-law, Grayson, Ky.
Griffin, Mark H., 1897, M. E. in E. E., Xenia, Electrical Engineer Soldiers' and Sailors' Orphans Home.
Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist.
Griffith, David Mathias, 1896, LL. B., Kecksburg, Pa.
Griffith, Wellington John, 1892, LL. B., Tiffin.
Griffiths, Benjamin Lincoln, 1898 L. B. B., Vaughnsville.
Grimsley, George Perry, 1890, B. A., 1891, M. A., (Ph. D., Johns Hopkins University, 1894), Topeka, Kansas, professor natural history, Washburn College.
Griswold, Lawrence William, 1892, B. A., New York City, London Assurance Co.
Groff, Orsylla Ann, 1894, G. Ph., North High street, Columbus, pharmacist.
Groff, Warren Noble, 1896, B. A., Tiffin, law student.
Groves, John Wesley, 1898, C. E. Batavia.
Guerin, Martha, 1896, B. Ph., Columbus.
Gugle, George Linville, 1896, LL. B., Columbus, attorney.
Gugle, Marie, 1897, B. A., Alexandria, Ind., teacher.
Guittard, Virgil, 1894, B, Sc., New Bedford.
Guitteau, William B., 1897, B. Ph., Columbus, law student, State University.
Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

H

Haas, Frank, 1895, C. E., 1896, E. M., Sharon Pa., Chemist for Sharon Steel Co.
Hagler, Howard, 1889, B. Sc., Washington C. H. farmer.
Haigler, Charles Edmund, 1898, B. Sc., Jeffersonville.
Hale, Frederick James, 1898, M. E. Columbus, fellow and laboratory assistant in mechanical enginering, State University.
Hall, Harry R., 1889, E. M. Dunbar, Pa., assistant general manager, Dunbar Furnace Co.
Halterman, Oscar Elmore, 1895, LL. B., B. S., (National Normal University.)
Hamilton, Charles R. 1893, B. A., Zanesville, Dun's Commercial Agency.
Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon.
Hammond, Bessie B., 1897, B. Ph., Columbus.
Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher.
Hancock, David R., 1889, G. Ph., M. D.
Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist.
Hannum, William Hamilton, 1887, B. A., Ratnagiri, India; American Presbyterian Mission in Western India.
Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.
Harlor, John David, 1895, B. A., Columbus, teacher in Central High School.
Harris, Frank Laverne, 1894, LL., B. (Ph. B., Tri-state Normal University), Payne.
Harris, Walter Conger, 1893, B. Sc., 68 W. Thirty-fifth street, New York, with Art Department of Herald.
Harrison, Warner, 1892, LL., B., East Town street, Columbus, attorney and solicitor C., A. & C. Railway.
Harrison, William Henry, 1885, C. E., Anaconda, Montana.
Harrold, Ernst Ellwood, 1895, G. Ph., dispenser chemical store-room, State University.
Harrop, Herbert Bailey, 1898, B. Sc., Columbus.
Hartsough, William H. Jr., 1898, B. Ph., Columbus, clerk in office of Supt. C., S. & H. Ry.
Hartwell, Arthur, 1888, M. E., Pittsburg, Pa., agent, Westinghouse E. & M., Co.
Hartwick, Louis M., 1897, M. E., Springfield, chief draughtsman for Foos Gas Engine Co.

Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., Columbus, student in Law College, State University.
Harvey, Emory Wayland, 1896, B. Ph., Cleveland, teacher.
Harvey, Florence Danford, 1898 B. Ph., Mt. Perry.
Harvey, Sherman Lee, 1896, G. Ph., Harrisburg.
Hassler. Robert Hanich. 1892, M. E., in E. E.
Hastings, Edwin George. 1898 B. Sc., Madison, Wis., student University Wisconsin.
Hayes, Seth, 1892, B. Sc., Fremont, principal of High School.
Hayward, George E. 1893, C. E., New Philadelphia, engineer, C., L. E. & W. Ry.
Hazelton, Bird, 1898, B. Ph., New Straitsville.
Hazlett, Robert, Jr., 1887, C. E., Wheeling W. Va., consulting engineer.
Heacock, William Preston, 1898, LL. B., Cardington.
Heath, Arthur T., 1887, G. Ph., Harbor, analytical chemist, consulting engineer and contractor.
Hebble, Charles Roy, 1896, M. E., in E. E., Cincinnati.
Hedges, Harry, 1888, B. A.
Heller, Albert Henry, 1890, C. E., Youngstown, Youngstown Bridge Co.
Henderson, Adelbert Andrew, 1895, C. E., Columbus, city engineer corps.
Henretta, Charles Michael, 1896, E. M.
Herbert, Charles, T., 1897, LL. B., Columbus, attorney.
Herms, Edith S., 1898 B. Ph., Portsmouth.
Herrick, Louise, 1893, B. A., (Mrs. Harry Abbott), Columbus.
Hess, Florence Louise, 1895, B. Ph., Columbus.
Hewitt, Strafford Reaves, 1898, M. E., in E. E., Columbus Mine Supply Co.
Hiatt, William Arthur, 1895, B. Ph., New York City, teacher in Stevens School, Hoboken, N. J.
Higbee, Charles E., 1883, B. Sc.
High, Odessa, 1896, B. A., West Jefferson, teacher.
Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.
Hill, I. T. Reynolds, 1896, B. Sc., (H. & F.), Berlin Heights.
Hine, James, S., 1893, B. Sc., Columbus, assistant professor of Entomology, State University.
Hine, Lucius A., 1888, E. M., 140, 50th St., Chicago, Ill., manufacturer of light casting etc.
Hipple, John Merton, 1898, M. E., in E. E., Turtle Creek, Pa., Westinghouse E. & M. Co.
Hirsch, Gustav, 1897, M. E., in E. E., Columbus, Lieut., U. S. Signal Corps.
Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, N. Y.
Hoffman, Arthur Sullivant, 1897, B. A., Coshocton, teacher in High School.
Homan, Frank, 1895, C. E., New Straitsville, Chf. Engr., C. H. H. C. & I. Co.
Hood, Sherman, 1894, B. Sc., Meander, gardner.
Hopkins, Charles Delnow, 1893, LL. B., (B. A., Ohio Wesleyan University), Athens.
Horton, Henry Pomeroy, 1889, B. Ph.
Houseman, Ruth U., 1897, B. Ph., Painesville, teacher in High School.
Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.
Hovey, Clark Samuel B. A., (Buchtell College) 1898, LL. B., Akron.
Howald, Ferdinand, 1878, B. Sc., Rush Run. W. Va., manager of mining operations.
Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.
Howard, Curtis C., 1878, B. Sc, M. Sc., 115 Jefferson avenue, Columbus, professor of chemistry in Starling Medical College.
Howard, Fanny Fern, 1896, B. A., Columbus.
Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney.

Howard, John Wilot, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.
Howells, Thomas J. 1897, E. M., Martins Ferry.
Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Co.
Hughes, Raymond Mollyneaux, A. B. (Miami University), 1897 M. Sc., Miami University, professor of chemistry.
Huddleson, Don Carlos, 1897, G. Ph., Columbus, assistant in Gymnasium, State University.
Hull, Mary Louise, 1894, B. A., (Mrs. C. H. Farber), Columbus.
Humphrey, J. Scott, 1879, B. Sc., Findlay, civil engineer.
Humphreys, Leona, 1895 B. A., Plain City, teacher in High School.
Hunt, William Franklin, 1887, M. E., attorney-at law, New York Life Building, St. Paul, Minn.
Huston, Charles H., 1897, LL. B., (B. S. Tri-State College, Ind.) Mansfield.
Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-law.
Hyle, Charles A., 1896, M. E., in E. E., Columbus, Weather Bureau.

I

Ingram, Imogene, 1897 B. Ph., Columbus.
Innis, Lyman H. 1893, B. A., 1895, LL. B., Columbus, attorney.
Ireland, Guy Llewellyn, 1895, M. E., Cincinnati.
Irvin, Chadwick H. 1897, M. E., Columbus.

J

Jackson, Frank Pierce, 1892, LL. B., 1893, LL. M., Columbus, attorney.
James, Florence May, 1896, B. A., (Mrs. Oscar R. Flynn) Columbus.
Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University.
Jenkins, William B., 1893, C. E , Wilmington, Columbus and Athens Ry.
Jenkins, Willis H., 1894 C. E., New York City, engineer.
Jennings, Levi E., 1897, M. E. in E. E., Eaton.
Johnson, Charles W., 1896, M. E. in E. E., Cincinnati, Designing Engr., Bullock Electric Co.
Johnson, George Edward, 1892, C. E., N. & W. Ry., Kenova, W. Va.
Johnson, Herbert Lincoln, R. 1892, M. E. in E. E., Cincinnati, Sec'y and Treas. Stewart Electric Co.
*Jones, A. A., 1886, C. E., died May, 1894.
Jones, Arthur James, 1898 , M. E. in E. E., Homestead, Pa., Carnegie Steel Works.
Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner Insurance Agency.
Jones, Alexander Houston, 1895, M. E. in E. E., St. Louis, Mo., with B. J. Percival, Engineer.
Jones, Benner, 1897, LL. B., Jackson.
Jones, Daniel D., 1893, G. Ph., Gallipolis, pharmacist, Epileptic Hospital.
Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chemist William Cramp & Sons, ship-builders.
Jones, Paul, 1880, B. A., Columbus, attorney-at-law.
Jones, Pearl N., 1892, M. E. in E. E., Pittsburg, Pa., Westinghouse E. & M. Co.
Jones, Smiley, 1894, E. M., Downieville, Cal., electrician Gold Bluff mine.
Jones, William Francis, 1896, D. V. M., Cincinnati, Miami Medical College.
Judd, Horace, 1897, M. E., Columbus, fellow in Mechanical Engineering, State University.
Judkins, Clyde H., 1897, LL. B. (A. B. Scio College), Flushing.
Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-law.

K

Keagle, Anna Brown, 1895, B. Ph., Columbus, teacher North High School.
Keffer, Frederick, 1892, M. E., Anaconda, B. C., Supt. Boundary Creek Mining Co.

Keifer, William White, 1886, B. A. (LL. B., Cincinnati), Springfield, attorney-at-law.
Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., Columbus, assistant in chemistry, Ohio Medical University.
Kellerman, Ivy, 1898, B. A., student, Cornell University.
Kellicott, William E., 1898, B. Ph., Marysville, teacher in High School.
Kellison, Edward Lafayette, 1897, B. Ph., Columbus, student in College of Law, State University.
Kemmler, Edward A., 1888, C. E., 895 S. High street, Columbus, assistant city engineer.
Kerr, Samuel Thompson, 1894, M. E. in E. E., Martin's Ferry, superintendent Electric Light Plant.
Kershaw, Francis Stewart, 1891, B. Ph., Boston, Mass.
Kershaw, Samuel Charles, 1892, B. Ph., Columbus, bookkeeper Columbus Bolt Works.
Kester, Fred. Edward, 1895, M. E. in E. E., Ithaca, N. Y,, scholarship Cornell University.
Kiesewetter, Louis Frank, 1891, C. E., (A B. Harvard, '92, and A. M., '93), Columbus, assistant cashier Ohio National Bank.
Kiler, Abdel William, 1896, G. Ph., druggist, Columbus.
Kirby, Harriet R., 1898, B. A., Columbus, teacher in North High School.
Kirker, Harry L., 1889, B. Sc., Centreville, Idaho, electrician,
Kiser, Katherine Daniel, 1895, B. A., Chicago, principal High School.
Kline, Charles H., 1897, M. E. in E. E., Dayton.
Knauss, William Henry, 1895, B. Sc., student Starling Medical College.
Knecht, Arthur Edward, 1898, M. E., Cincinnati.
Knight, Ruby Ray, 1895, B. Sc., Middleport.
Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.
Knopf, George W., 1883, B. Sc., Pittsburg, Pa., bridge builder.
Kohr, Donald Alexis, 1898, B. Ph., Westerville.
Krauss, Bertha Katherine, 1892, Ottawa.
Krieger, Charles Henry, 1887, G. Ph., Columbus, superintendent the Kauffman-Lattimer Co.
Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., Columbus, attorney.
Krumm, Herbert Zettler, 1898, B. Ph., Columbus.
Krumm, Lillian Louise, 1895, B. Ph., (Mrs. Harry Rush Wilson), Columbus.
Krumm, Louis Ralph, 1898, M. E. in E. E., Columbus.
Kuhn, Vallie Howard, 1896, M. E. in E. E., Etna.
Kuhn, Harry Waldo, 1897, B. Sc., Columbus, fellow in mathematics, State University

L

Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., Engineer Westinghouse E. & M. Co.
Lamme, Bertha A., 1893, M. E., in E. E., Pittsburg, Pa., Westinghouse E. & M. Co.
Landacre, Francis Leroy, 1895, B. A., assistant in zoology and entomology, State University.
Landacre, Walter Alexander, 1891, G. Ph., Columbus, student State University.
Landis, Walter Victor Titus, 1895, B. Ph., Dayton.
Lane, Quinton R., 1898, B. Ph., Canal Winchester.
Large, Joseph H., 1890, C. E., Pittsburg, Pa., assistant inspector of bridges, Pennsylvania Southwest system.
Laughlin, Hugh Clarence, 1890, B. A., (A. M. 1895, University of Nebraska), 1712 Bathgate avenue, New York, teacher in High School for Boys and Girls.
Lavery, William F., 1890, D. V. M., veterinary surgeon, State University.
Lawrence, Arthur K., 1897, G. Ph., Columbus.
Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.

Lee, Edwin S., 1893, G. Ph., Columbus, druggist.
Lee, Robert M., 1897, M. E., Columbus.
Leffler, Edward Victor, 1896, G. Ph., Leipsic.
Lemert, Helen Ora, 1894, B. A., Columbus, teacher High School.
Lentz, Alice B., 1897, B. Ph., Lloydsville.
Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.
Leonard, James Lincoln, 1893, LL. B., (B. S., Ohio Normal University), Welcome.
Levering, Orpheus D., 1893, M. E., Winchester, Mass., The McKay Metallic Fastening Association.
Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.
Lewis, Thomas K., 1894, B. Sc., Columbus, assistant in drawing, State University.
Lincoln, Paul Martyn, 1892, M. E., in E. E., Niagara, N. Y., Superintendent of power house, The Cataract Construction Co.
Lindo, William C., 1896, C. E., Cleveland, O., "Nickle Plate" R. R., engineer.
Linson, Irvin, 1882, B. A.
Lisle, Mabel, 1897, B. Ph., Columbus.
Logan, Lavallette Lasea, 1896, E. M., Scranton, Pa., professor National Correspondence School.
Logsdon, Clement Jay, 1898, G. Ph., Columbus.
Loomis, John Cooper, 1898, LL. B., Tiffin.
Lott, Charles Milford, 1895, M. E. in E. E.
Loveberry, Clarence, 1896, D. V. M., Minneapolis, Minn., government meat inspector.
Lovejoy, Ellis, 1885, E. M., Union Furnace, chemist and superintendent Columbus Brick and Terra Cotta Co.
Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Light Co.
Luce, George Ernest, 1897, LL. B., (A. B., Ohio Wesleyan University), Columbus.
Luse, Clara E., 1897, B. Ph., (Mrs. Herbert T. Scott), Alexandria.
Lusk, William Vinton, 1893, D. V. M., Ft. Wingate, New Mexico, veterinary surgeon, Ind. cavalry.
Lydenberg, Walter B., 1898, B. A., Dayton.
Lynas, Caroline, 1898, B. A., Columbus.
Lynas, Charles E., 1898, B. A., Columbus.

M

MacGuire, Charles White, 1895, G. Ph., Toledo, student Toledo Medical College.
Mackey, Ure LaVerne, 1893, M. E. in E. E., (B. A., Wooster University), Allegheny, Pa., student in United Presbyterian Theological Seminary.
Magly, Robert A., 1897, G. Ph., Columbus.
Magruder, Leonard Anthony, 1895, B Ph., 1896, LL. M.
Maier, John Valentine, 1895, LL. B., (B. S., Northern Indiana Normal University.)
Malone, William Ruskin, 1885, B. A., Toledo, with New York Life Insurance Co.
Manecke, Gilbert, 1897, LL. B., Fostoria.
Manley, Rush Emmett, 1894, M. E. in E. E.
Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of science, male High School.
Marquard, Frank Fred, B. L., 1896, C. E., Dayton.
Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney.
Martell, Leonard Roland, 1898, B. A., Columbus.
Martin, Edwin Dunlevy, 1891, B. Ph., Lee Centre, Ill., teacher.
Martin, George, 1897, M. E. in E. E., Norwalk, Central Union Telegraph Co.
Martin, Percy, 1892, M. E. in E. E. with Ludw. Loewe & Co., Martinikenfelde, Kaiserin Augusta Allee, Berlin, N. W., Germany.

Marvin, Charles Frederick, 1883, M. E. Washington, D. C., U. S. Weather Bureau.
Mason, George F., 1890, G. Ph., Minneapolis, Minn., pharmacist.
Masters, George Albert, 1886, C. E.. Toledo.
Mathers, John Harrison, 1895, B. Ph., Conover.
Mathias, Frederick W.. 1893, B. Sc., Toledo, teacher High School.
Matson, George H., 1882, G. Ph., 93 Lexington ave., Columbus, professor of pharmacy, Ohio Medical University.
Matson, William Edgar, 1896, M. E. in E. E., Lynn, Mass., with General Electric Co.
Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.
Mays, James Wesley, 1897, B. Ph.. Columbus, student in College of Law, State University.
McAllen, William Johnson, 1894, C. E., Mt. Vernon, O., engineer.
McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., Columbus, attorney.
McCarter, Flora, 1897, B. A., Columbus.
McCarter, Robert Dale, Jr.. 1895, M. E. in E. E., Schenectady, N. Y., with Gen. Electric Co.
McClelland, Chalmer Kirk, 1898 B. Sc. (Agr.), Andover.
McCormick, J. H., 1880, M. E.. Dayton, National Cash Register Co.
McCormick, William Francis, 1896, M. E., Columbus.
McCulloch, George Elmer, 1891, B. Sc.
McDowell, John Andrew, 1882, B. Sc., 949 Neil avenue, Columbus, secretary-treasurer of the Pleukharp Barrel Machine Co.
McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law.
McGregor, James Howard, 1894, B. Sc., New York, assistant in zoology, Columbia University.
McGrew, John Alexander, 1895, C. E., Cleveland, engineer, with Pennsylvania Railroad Co.
McGuffey, Francis Hoyt, 1894, M. E. in E. E., McGuffey.
McIntire, Alfred Heber, 1888. M. E. in E. E., Columbus, Fellow in Industrial Arts.
McLaughlin, Annis, 1897, B. Ph., Columbus.
McLaughlin, James Audley, 1895, LL. B., (B. A., Monmouth College).
*McMackin, Amasa Brown, 1879, B. Sc., died May 22, 1891.
McNary, George Bull, Jr., 1896, M. E. in E. E., Toledo, with Bissel & Co.
McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., Columbus, State University, professor of chemistry.
Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.
Mead, Rollo Nooman, 1895, D. V. M., Grand Rapids.
Mebs, George H., 1897, G. Ph., Columbus.
Meek, Charles Wesley, 1894, LL. B., Toledo.
Meek, Edward Duncan, 1896, B. A., Steubenville, assistant principal High School.
Meek, William W., 1889, B. Ph., 121 Fifteenth avenue, Columbus, J. W. Meek & Co.
Mendenhall, Maurice H., 1893, D. V. M., West Elkton.
Menough, Arthur George, 1894, E. M., Wellsville.
Mercer, Frank Emmet, 1896, M. E. in E. E., Wauseon.
Merrill, Alice Louise, 1893, B. A., 6565 Yale avenue, Chicago, Ill., Station O, teacher.
Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.
Mershon, Ralph D., 1890, M. E., Cripple Creek, Col., engineer, Power Co.
Mesloh, Charles, W., 1889, B. A., 1895, M. A., assistant professor of German, State University.
*Metters, Allen, 1896, B. A., died January 22, 1898.
Metzger, Edward H., 1897, G. Ph., Circleville.
Mickey, Blanche D., 1898, B. Ph., Columbus.
Middleswart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Constitution.
Middleton, Ambrose, 1895, G. Ph., Lancaster.

Miller, Carl James, 1898, B. Sc. (Agr.), Franklin.
Miller, Charles C., 1883, B. A., Lima, Superintendent Schools.
Miller, Daniel Elmer, 1890, G. Ph., Dayton, druggist.
Miller, Frank Case, 1893, C. E., Columbus, assistant engineer C. S. & H., Short Line Division.
Miller, Harry Franklin, 1889, M. E., McKeesport, Pa., Constructing Engineer, National Tube Works.
Miller, Henry P., 1897, D. V. M., Sunbury.
Miller, Walter McNab, B. Sc., 1885, Reno, Nev., Professor of Anatomy and Physiology, State University.
*Milligan, James Porter, 1886, B. A., died, February, 1899.
Mills, William C., 1898, B. Sc. (H. & F.), Columbus, curator archæological collection, State University.
Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.
Mix, Edward W., 1888, B. Sc., Paris, France, electrical engineering, representing the General Electric Co.
Mix, Melvin Noble, 1895, B. Ph., New York, The World, journalist.
Mock, George Herbert, 1891, B. Sc., Ohio State Savings Bank, Columbus.
Montgomery, Howard, 1896, B. Ph.
Moodie, Alice Haynes, 1890, B. A., (Mrs. Arthur Hartwell), Pittsburg, Pa.
Mooney, Daniel Francis, 1894, LL. B., St. Mary's.
Moore, Henry Curtis, 1897, B. Sc., Washington, C. H.
Moore, Virgil Owen, 1895, B. Sc., student Sterling Medical College.
Morhart, Katherine Elizabeth, 1893, B. Ph., Pomeroy.
Morrey, Annie Eliza, 1896, B. A., Chester Hill.
Morrey, Charles B., 1890, B. A., 1896, M. D., student, Paris, France.
Morrey, William T., 1888, B. A., Hoboken, N. J., teacher in Stevens School.
Morris, Clyde, T., 1898, C. E., Columbus, New Columbus, Bdg. Co.
Morrison, M. Frank, 1879, B. A., Mrs. S. H. Short, E. 9th avenue, Cleveland.
Morrison, Robt. O., 1893, C. E., Cincinnati, engineer on Little Miami R. R.
Morton, George L., 1884, M. E., (LL. B., Nat'l Law School), chief examiner, patent office, Washington, D. C.
Moses, Martha Allston, 1891, B. Ph., 1111 Hinman avenue, Evanston, Ill., book-keeper.
Moss, Blanche, 1898, B. A., Columbus.
Moss, William, 1898, G. Ph., Buffalo.
Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Co.
Mull, Bert LaForrest, 1898, LL. B., Columbus.
Mullay, Annie, 1887, B. Ph., Chicago, teacher.
Mundhenk, Fred., 1896, B. Ph., Columbus, life insurance agent.
Munn, Mortimer Adam, 1894, C. E., Mansfield, engineer.
Munson, Theodore, 1898, B. Sc., Zanesville.
Murray, Claude R., 1895, B. A., Middleport, Principal of High School.
Murray, Frank Erskine, 1892, D. V. M., Greenfield, veterinary surgeon.
Myers, Joseph Simmons, 1887, B. A., Pittsburg, Pa., editor Pittsburg Post.
Myers, Ord, 1895, M. E. in E. E., Philadelphia, Pa., superintendent street railroad.
Myers, Roy V., 1893, C. E., Dayton, Tenn., mining eng.
Myers, Uriah H., 1887, E. M., Allegheny, Pa., chemist, Marshall Kennedy Milling Company.

N

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Needles, Mana R., 1890, B. Ph., (Mrs. Kilpatrick), Owosso, Mich.
Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina.

Newton, Henry S., 1889, B. Sc., mechanical and electrical engineer, Syracuse, N. Y.
Newton, Samuel Donald, 1895, C. E., engineer on Southern R. R.
Niewvahner, John Henry, 1891, B. A., Jackson, assistant cashier, First National Bank.
Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.
Nutt, Arthur Chase, 1897, B. Ph., scholarship in philosophy, Cornell University.

O

Obetz, Francis Henry, 1896, G. Ph., Columbus.
O'Brine, David, 1881, B. Sc., M. Sc., E. M., D. Sc., M. D., Urbana, physician.
Odebrecht, August, 1895, G. Ph., Columbus, with H. Braun & Sons.
O'Kane, Sarah Eliza, 1891, B. Ph., (Mrs. F. M. Raymund), 215 W. Tenth avenue, Columbus,
O'Kane, Walter Collins, 1897, B. A., Columbus, "Columbus Evening Dispatch."
Orton, Clara Gregory, 1897, B. Ph., Columbus.
Orton, Edward Jr., 1894, E. M., Columbus, director of the department of Clay-working and Ceramics, State University.
Osborn, Samuel Galloway, 1897, LL. B., Columbus, attorney.
Osborn, Raymond Carroll, 1898, B. Sc., Columbus.
Ozias, Albert N., 1889, M. Sc., Racine, Wis., principal High School.

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Page, William Herbert, 1892, LL. B., 1894, LL. M. (B. A., Yale), Columbus, professor of elementary law, State University.
Palmer, Walter K., 1893, M. E., State University Lawrence, Kansas.
Parker, John Bernard, 1898, B. A., Columbus, fellow in Rhetoric, State University.
Patch, Homer Austin, 1896, C. E., Youngstown, Youngstown Bdg. Co.
Patchell, Owen P., 1889, B. Ph., Ardmore, Ind., attorney-at-law.
Patchin, Rufus Harry, 1898, LL. B., Chardon, attorney-at-law.
Payne, Halbert Edwin, 1887, M. E., 256 Broadway, New York City, American Typewriter Co.
Peal, Allen Saunders, 1895, B. A., 3222 State street, Chicago, Ill.
Pearce, George Downer, 1892, G. Ph., Goshen, Ind., pharmacist.
Pearl, Allen Sexton, 1894, M. E. in E. E., Chicago, Ill., Central Electric Company.
Pease, Edward Livingstone, 1895, law student, State University.
Pedlow, Edward Benjamin, 1893, C. E., New Straitsville, superintendent, Columbus and Hocking Coal and Iron Co.
Pierce, John Mattinson, 1895, M. E. in E. E., South Charleston.
Pence. David Arrel, 1894, M. E., Lowellville.
Perkins, Earl Harley, 1893, LL. B., Wellington.
Peters, William Lincoln, 1885, M. E., Riverside, Cal., manufacturer.
Pfarr, Philip Lewis, 1896, B. Sc., (Agr.) Dennison, Iowa.
Phelps, Cyrus Alba, 1892, B. Sc., Sombereto, Jacataccas, Mexico, with Sombereto Mining and Milling Co.
Pilcher, Hastings Moore, 1895, M. E. in E. E.
Plantz, Wyatt Garfield, 1894, B. A., Pomeroy.
Pleukharp, Chas. V., 1885, M. E.
Plimmer, Gertrude Alice, 1896, B. Ph., Columbus.
Polk, Walter, 1895, C. E., Indianapolis, Ind., Assistant general foreman, Telephone Co.
Pomerene, Frank Etherington, 1891, B. Ph., 1895, LL. B., Coshocton, attorney-at-law.
Pool, Harwood Redington, 1881, B. Ph., LL. B. 62 Cedar street, New York City.
Porter, Mary Baxter, 1897, B. Ph., Columbus.

Postle, Herman R., 1894, C. E., Columbus, teacher.
Postle, Kenneth F., 1894, B. A.
Powell, Chas. S., 1893, M. E. in E. E., Cleveland, agent Westinghouse E. and M. Co.
Powell, Eward Thompson, 1896, LL. B., Columbus, attorney.
Powell, Norman Clemson, 1895, D. V. M., Damascus.
Prall, Anna Dickson, 1898, B. A., Columbus.
Price, Homer Charles, 1897, B. Sc., (Agr.) Newark, farmer.
Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.
Pryor, Charles Foster. 1898, LL. B., Barnesville.
Pugh, Lawrence Randolph Whetzel, 1893, B. Ph., 1895, LL. B., Columbus, attorney-at-law.
Pumphrey, John Homer, 1898, B. Sc., Clayton.
Putnam, Abbey Slocum, 1897, B. Ph., Fisher, Ill.

R

Radcliff, Charles Anson, 1895, B. Ph., attorney, Jackson.
Randall, Emilius Oviatt, 1892, LL. M., (B. Ph., Cornell University), Columbus, attorney-at-law, professor in Law School, State University.
Randolph, Edward S., 1897, LL. B., (A. B., Ohio Wesleyan University), Somerset.
Rane, Frank William 1891, B. Agr. (1892, M. Sc., Cornell), Durham, N. H., professor of Agriculture and Horticulture, New Hampshire College.
Rarick, Murray M., 1896, B. Sc., (Agr.,) Columbus, Student Starling Medical College.
Rasor, Samuel Eugene, 1898, B. Sc., Columbus, fellow in Mathematics, State University.
Ray, Frank A., 1887, E. M., Columbus, associate professor of mine engineering, State University.
Ray, William M., 1893, C. E., Room 825, Hickox Bl'd., Cleveland. C. L. & W. R. R.
Raymond, Coles Abel, 1894, C. E., Youngstown, Youngstown Bdg. Co.
Raymond, Frank, M. 1888, B. A., Columbus, attorney-at-law.
Redick, Mary Glisson, 1898, B. Ph., Findlay.
Reed, Robert Browning, 1896, M. E. in E. E., Zanesville, Electrical Contractor.
Reed, William Allen, 1897, E. M., Central City, Colo, assaying officers, Alsdorf & Paul.
Reese, William Daniel, 1891, B. A.
Reese, William Henry, 1896, G. Ph., Glen Roy.
Reeves, Archibald C., 1887, C. E., 153 Superior avenue, Dayton, civil engineer.
Resler, Edwin D., (B. A., Otterbein) 1897, M. A. Westerville.
Rice, Herbert A., 1897, C. E., Columbus, with Yost & Packard, Arch.
Rice, Mabel Elise, 1898, B. A., Columbus, student.
Richardson, Hamilton Hutchinson, 1892, B. Agr., Brooklyn, gardener.
Richey, Luzerne A., 1897, B. Ph., Denver, Col., attorney.
Rickey, Alla B., 1889, B. Ph., (Mrs. Geo. H. Cless,) Broad street, Columbus.
Riddle, Howard Sterling, 1897, M. E. in E. E., Columbus, Jeffrey Mfg. Co.
Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Columbus.
Riggs, Ernest Jacob, 1895, B. Sc., (agr.,) M. Sc., (H. & F.,) Angola.
Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, teacher in High School and fellow and assistant in American History, State University.
Ritchey, Joseph C., 1890, B. Sc., Mingo Junction, with Junction Iron and Steel Co.
Russell, Ralston, 1896, B. Ph., Pomeroy.
Roberts, Cyrus Swan, 1898, E. M., Columbus.
Robinson, Eckla Mazola, 1892, B. Sc., (Mrs. George Rowe.)
Robinson, Erdis Geroska, 1893, C. E., Mexico, D. F. Mexico, Engineering Department of Mexican Central Railway.
Robinson, Zella Vina, 1898, B. Ph., Columbus.

Rogers, Andrews, 1896, B. Ph., New York City, student, College of Physicians and Surgeons.
Rogers, James Bertrand, 1896, E. M., Youngstown.
Root, Willis J., 1885, E. M., Columbus, Chemist, King, Gilbert and Warren Steel Co.
Rowlee, Henry A., 1897, M. E., Columbus, government inspector of gun carriages.
Ruhlen, Carl Marble, 1898, M. E., 16 St. James ave., Boston, Mass.
Ruhlen, Frank, 1896, B. Sc., (Agr.,) Columbus, Assistant in Agriculture, State University.
Rule, Ralph R., 1897, LL., B. (B. S. Tri-State College, Ind.) Greenspring.
Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School.

S

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Safford, Robert Edwin, 1894, B. Sc., Columbus, with Columbus Savings Association.
Sandoe, Lydora Olivia, 1893, LL. B., (Mrs. Bachman), 1425, Bryden Road, Columbus.
Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., Columbus, attorney.
Schaub, Edward Louis Tascher, 1885. M. E., Dennison, Box 625, with P., C. & St. L. R. R.
Schaup, Charles E., 1897, E. M., Syracuse, N. Y., assistant engineer, maintenance of way, West Shore R. R.
Scheibell, William O., 1888, E. M., Upper Sandusky, manufacturer artificial stone.
Schroll, Otto, 1886, C. E., Wheeling, W. Va., civil engineer.
Schueller, Erwin Waldemar, 1892, B. A., M. D., 1894, Columbus, physician.
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Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.
Scott, Herbert, 1893, B. Sc., pastor M. E. Church, Alexandria.
Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., electrician Westinghouse E. & M. Co.
Scott, Daisy Medill, 1887, B. A., Columbus, teacher in High School.
Scott, Emma, 1888, B. Sc., Brindaban, India Missionary.
Scott, Ernest, 1897, B. Sc., (Agr.), Columbus, student, Ohio Medical University.
Scott, Mary Odella, 1885, B. A., Columbus, teacher in High School.
Scott, May Mermod, 1887, B. A., 1274 Summit street, Columbus.
Scott, Mary Bole, 1896, B. A., Columbus, teacher.
Sears, Walter James, 1894, B. Ph., Chillicothe.
Sedgwick, Edward Crayton, 1895, M. E., in E. E., Zanesville.
Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist Ohio Experiment Station.
Sellenings, Albert Eugene, 1896, B. Ph., student Bellevue Medical College, New York.
Serva, Adam A., 1893, M. E., in E. E., New York City, with General Electric Co.
Shark, Robert J., 1897, LL. B., Hamilton.
Sharp, Charles C., 1888, C. E., Corning, superintendent mining department, Sunday Creek Coal Co.
Sharp, David Barton, 1893, LL. B , Columbus.
Shellabarger, Marley Rolin, 1897, B. Sc., (Agr.) Garland.
*Shepard, Frank Reed, 1893, B. A., died August, 1893.
Sherman, Christopher Ellis, 1894, C. E., Columbus, assistant professor in civil engineering, State University.
Shield, Wallace B., 1898, B. A., Kansas City, Mo.

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Shuck, Carey Lucas, 1898, B. Ph., Columbus, "Columbus Evening Dispatch."

Shurtz, Olive L., 1898, B. Ph., Columbus.

Siebert, Wilbur H., 1888, B. A., (M. A. Harvard), Columbus, assistant professor history, State University.

Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D., (John's Hopkins University), Minneapolis, Minn., assistant professor of animal biology, University of Minnesota.

Sigerfoos, Edward, 1891, B. Ph., Fort McPherson, Georgia, 1st. Lieutenant Fifth Infantry, U. S. Army.

Simonton, Mark, 1895, M. E. in E. E.

Simpson, Abigail Ellen, 1895, B. A., London, teacher in High School.

Sinks, Frederick Nicholas, Ph. L., (Yale University), 1898, LL. B., Columbus.

Skinner, Chas. E., 1890, M. E., box 435, Wilkinsburg, Pa., Westinghouse E. & M. Co

Slater, Burr Homer, 1895, G. Ph., Chesterville, pharmacist.

Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.

Smith, Alice May, 1897, B. Ph., Sidney, teacher.

Smith, Burton Griffin, 1895, G. Ph., Newark.

Smith, Carl Clyde, 1890, B. Ph., Marietta.

Smith, Clarence Elmer, 1898, G. Ph., Massillon.

Smith, Edward E., 1897, G. Ph., Wooster.

Smith, Edward Trevett, 1898, LL. B., Holden, Mo.

Smith, Florizel, 1880, B. A., Board of Trade, Columbus, attorney-at-law.

Smith, Horace Prescott, 1886, B. Sc.

Smith, Maud Virginia, 1894, B. A., (Mrs. Thomas Chalmers), Port Huron, Mich.

Smith, Myron Alphonso, 1892, B. Ph., Columbus, with Keyes and Thomas, real estate agents.

Smith, Nathaniel B., 1893, D. V. M.

Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.

Snider, Charles M., 1897, B. Sc., (Ind. Arts.), Columbus.

Snider, Jesse Worthington, 1893, LL. B., LL. M., Columbus.

Snively, Harry H., 1895, B. A., Columbus, teacher in High School.

Snow, Walter A., 1897, B. Ph., Chicago, Ill., student Chicago Theological Seminary.

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Snyder, James Edward, 1892, LL. B., (B. A. Wooster University).

Snyder, Walter S., 1897, LL. B., Columbus, attorney.

Somermeir, Edward Everett, 1898, G. Ph. Columbus, assistant in metallurgy, State University.

Southard, Eustace Elden, 1895, G. Ph., Columbus, pharmacist.

Southard, Thomas Campbell, 1896, B. A., McConnelsville.

Sparks, Edwin Earle, 1884, B. A., 1892, M. A., Chicago University, assistant professor.

Spencer, William Henry, 1891, G. Ph., Oberlin, druggist.

Sperr, Frederick W., 1883, E. M. Houghton, Mich., professor of civil and mining engineering, Michigan School of Mines.

Sprague, Charles Franklin, 1896, B. A., student in College of Law, State University.

Spurrier, John Randolph, 1896, M. E. in E. E., Pittsburg, Westinghouse, E and M. Co.

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Index

	PAGE
Academic Year, the	47
Admission, examinations for	53
methods of	53
Admission to advanced standing	54
College of Agriculture	56, 57
College of Arts, Philosophy and Science	67
College of Engineering	83
College of Law	99–101
College of Pharmacy	107
College of Veterinary Medicine	111
Course in Arts	67
Course in Dairying	63
Course Preparatory to Law and to Journalism	80
Course Preparatory to Medicine	82
Course in Science	69
English Course in Philosophy	69
General statement as to	53
Graduate work	54
Latin Course in Philosophy	68
Modern Language Course in Philosophy	68
Short Course in Agriculture	63
Short Course in Ceramics	96
Short Course in Domestic Economy	63
Short Course in Industrial arts	96
Short Course in Mining	96
Short Course in Pharmacy	109
Special Studies	53
Advanced Standing, admission to	54
Agricultural Chemistry, department location	33
Work in—described	122
Agriculture, College of—admission	56, 57
Museum	43
Department of—equipment	34
Free scholarship in	48
Outline of Course	58, 59
Outline of Short Course	64
Short Course, admission	63
Short Course in	64
Work, in described	121, 122
Alumni Association, officers of	191
Alumni, Directory of	193
American History and Political Science, work in described	122–124
Anatomy and Physiology, equipment	40
work in—described	124, 125
Ancient Art, work in—described	143
Announcements	5
Apparatus and Laboratories, described	34–42
Archæology, Museum collections of	43
Architecture, outline of Course	95
work in—described	135
Armory and Gymnasium, described	33
Art, Ancient, work in—described	143
Arts, Course in—admission	67
outlined	70
Astronomical Observatory, described	32
Astronomy, work in—described	125, 126
Attendance, see Enrollment.	
Biological Hall, described	33
Boarding expenses	49
Board of Trustees	6
Botanical Hall, described	31
Botany, department of—equipment	35
museum	43
work in described	126, 127
Buildings, described	31–34
Cadet Service, required—*Note*	58
Cadet uniform, expense of	49
Calendar	3
Ceramics, *see* Clay-working and Ceramics.	
Chemical Hall, described	31
Chemistry, Agr'l—department location	33
work in—described	122
Chemistry, Special Course in	93
Chemistry, department of—equipment	35
work in—described	127–129
Christian Association, Young Men's	44
Civil Engineering, department equipment	35
outline of Course	85
work in—described	129, 130
Clay-working and Ceramics, admission	
Short Course	96
Course in—outlined	90
department of—location	33
equipment	36
outline of Short Course	97
work in—described	130, 131
Co-education, provided	53
College of Agriculture, admission	56
Arts, Philosophy and Science—admission	67
Engineering—admission	83
Short Courses	96
Law—detailed statement of	99–106
location	31
Pharmacy, admission	107
Veterinary Medicine—admission	111

PAGE

Colleges, other—students from 53
Colleges, the 30
Columbus High Schools as preparatory schools—*See* Note, p. 56, and elsewhere.
Committees of Board of Trustees 6
Course in Agriculture, outlined 58, 59
Architecture, outlined 95
Arts, admission 67
Arts, outlined 70
Chemistry 93
Civil Engineering—outlined 85
Clay-working and Ceramics—outlined 90
Dairying—outlined 65
Domestic Economy—outlined 62
Electrical Engineering—outlined 88
General Science—outlined 78
Horticulture and Forestry—outlined 60
Industrial Arts—outlined 91
Course in Law—outlined 101, 102
Mechanical Engineer'g—outlined 87
Mine Engineering—outlined 86
Pharmacy—outlined 108, 109
Philosophy, English—outlined 76
Latin—outlined 72
Modern Language ... 74
Science, admission 69
Veterinary Medicine—outlined ... 112
Preparatory to Law and to Journalism—admission 80
outlined 80
Preparatory to Medicine—outlined ... 82

Dairying, Course in—admission 63
outlined 65
Days and Dates 5
Degrees, Bachelor of Laws 104
described 30, 54
Doctor of Philosophy 54
Doctor of Science 54
Masters' degrees 54
Master of Laws 104
Departments, work of—described 121
Doctor of Philosophy 54
Doctor of Science 54
Domestic Economy—department of—equipment 36
free Scholarship in ... 48
outline of Course 62
outline of S't Course 66
Short Course—admission 63
Short Course in 66
Work in, described 132, 133
Dormitory expenses 49
Dormitory, North—described 34
Dormitory, South—described 34
Drawing, department of—equipment 36
work in—described 134, 135

Economics, work in—described 135–137
Education, work in—described 137, 138
Education, State System of 29
Elective Studies, rules concerning—*See* at close of each four years' Course

PAGE

Electrical Engineering, Course in—outlined 88
equipment 37
work in—described 138, 139
Electrical Hall, described 31
Elocution and Oratory, work in—described 139
Emerson McMillin Observatory, described 32
Employment, for students 50
Engineering, Civil—outline of Course 85
work in—described 129, 130
College of—admission 83
College of—Short Courses 96
Electrical—outline of Course 88
Electrical, work in—described 138–197
Mechanical—outline of Course 87
Mechanical, work in—described 148, 149
Mine—outline of Course 86
Mine, work in—described 150
English Course in Philosophy, admission 69
outlined 76
English Language, work in—described 154
English Literature, work in—described .. 139, 140
Enrollment 160
Entomology, work in—described 157, 158
equipment 41
Entrance examinations, dates 53
Equipment and Laboratories, described 34-42
Ethics—*See* Philosophy, work described.
European History, work in—described ... 122, 123
Executive Department, roster of 23
Expenses 47-49
estimated 49

Faculties, changes in—1898—1899 19
Faculties, changes in titles 1898-1899 21
Faculties, Members of 9
Fees 47-49
Fees, College of Law 48
Fellowships 55
Forestry Bureau 47
Free Scholarships 48
French—*See* Romance Languages.

Geology, department of—equipment 37
Museum 42
work in—described 140, 141
German, work in—described 142
Graduate work 54
Graduation Fee 48
Greek, work in—described 143
Gymnasium and Armory, described 33

Hayes Hall, described 32
Higher Degrees 54
High School graduates, how recognized 53
History, work in described 122-124
and Political Science, work in—described 124
Horse-shoeing, instruction in 157
Horticultural Hall—described 32
Horticulture and Forestry—equipment 37
outline of Course 60, 61
Horticulture, work in—described 143, 144
Hospital, Veterinary 3

PAGE

Incidentals Fees 47
Industrial Arts, admission to Short Course. 96
outline of Course 91
outline of Short Course 98
Industrial Arts and Shopwork, work in—described 144, 145
Instruction, Courses of—*See* the Colleges, and Departments.
Italian—*See* Romance Languages.

Journalism, outline of Course preparatory to 80
King's Daughters 45

Laboratories and equipment, described 34-42
Laboratory Fees 47, 48
Labor, for self-support 50
Lake Laboratory, the 41
Latin Course in Philosophy—admission 68
outlined 72
Latin, work in—described 145, 146
Law, College of—detailed statement 99-106
location 31
Course preparatory to—outlined 80
Fees 48-106
Libraries 105
outline of Course in 101, 102
work in—described 146
Libraries 44
Libraries, Law 105
Literary and other Societies 45
Living expenses 49
Location of University 30
Logic—*See* Philosophy, work described

Major Study—required—*See* note, page 71 and elsewhere.
Master's degree 54
Mathematics, work in—described 146, 147
Matriculation—*See* Entrance Requirements, Admission, etc.
Mechanical Engineering, equipment 38
outline of Course 87
work in—described 148, 149
Mechanical Hall, described 31
Medicine, outline of Course preparatory to. 82
Members of the Faculties, and other Instructors 9
Metallurgy—equipment 38
and Mineralogy, work in—described 149, 150
Military Science, work in—described 150
Mine Engineering, department of—location 31
equipment 39
outline of Course 86
work in—described 150
Mineralogy, work in—described 149, 150
Mining, admission to Short Course 96
outline of short Course 96
Modern Language Course in Philosophy—admission 68
outline of 74
Moral and Religious culture 44
Museums, the 42-44

North Dormitory, described 34

PAGE

Observatry, Astronomical, described 32
Officers of Board of Trustees 6
Ohio Forestry Bureau 47
Oratory, work in—described 139
Organization of University 30
Orton Hall, described 31

Pedagogical Conference, Enrollment 155
Pedagogy—*See* Education.
Pharmacy, admission to College of 107
department of—equipment 39
department of—location 31
outline of Course 108, 109
outline of Short Course 110
work in—described 150, 151
Philosophy, work in—described 151, 152
Photography, *See* Drawing, work described.
Physical Training 47
Physical Training, required—*Note* 58
Physics, department of—equipment 40
work in—described 152, 153
Physiology, department of—equipment 40
work in—described 124, 125
Political Science, work in—described 134
Prizes 55
Psychology—*See* Philosophy.
Public Education State system of 29

Registration—*See* Fees 4
Religious Organizations 44
Requirements for admission—*See* Admission.
Residences, described 34
Rhetoric and English Language, work in—described 153, 154
Romance Languages, work in—described 154-156

Scholarships, Free 43
Science Course, admission 69
Science, general outline of Course in 78
Self-support 50
Shopwork—equipment 40
work in—described 145
Short Courses—Agriculture 64
Clay-working and Ceramics—outlined 97
College of Engineering 96
Domestic Economy 63-66
Industrial Arts—outlined 96
Mining—outlined 96
Pharmacy—admission 109
outlined 110
Special Studies, admission to 53
Societies, Literary and other 45
South Dormitory, described 34
State System of Education 29
Students, names, records, etc 160
Summer School 113-118
Summer Library School 117, 118

Teacher's Certificates, available for entrance 53
Terms and Vacations 47
Titles of Professors, Changes in 31

	PAGE
Townshend Hall, described	32
Trustees, Board of	6
Committees of Board	6
Officers of Board	6
Uniform, cadet—cost of	49
University Addresses	24
University Hall, described	31
University, buildings of	31
location of	30
organization of	30
the—and the State	29
Vacations	47
Veterinary Hospital, described	32
Veterinary Medicine, admission to College of	111
equipment	41
free scholarship in	48
outline of Course in	112
work in, described	156, 157
Women admitted as students	53
Work, for students	50
Y. M. C. A	*44
Zoology, department of—Museum	43
and Entomology—equipment	41
work in, described	157, 158

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OF THE

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TO THE

GOVERNOR OF OHIO

FOR THE

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OF THE

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TO THE

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FOR THE

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ARTHUR WINFRED HODGMAN,
Assistant Professor of Greek and Latin — 164 West Ninth avenue.

CHRISTOPHER ELIAS SHERMAN,
Assistant Professor of Civil Engineering — 244 Twentieth street.

CHARLES WILLIAM FOULK,
Assistant Professor of General Chemistry — 41 Eleventh avenue.

WILLIAM LUCIUS GRAVES,
Assistant Professor of Rhetoric — 878 Dennison avenue.

JOHN ADAMS BOWNOCKER,
Assistant Professor of Geology — Clark Place and High street.

JAMES HENRY COLLINS,
Lecturer on Federal Practice — 57 Lexington avenue; Ruggery Building.

FAXON FRANKLIN DUANE ALBERY,
Lecturer on the Law of Insurance — 37 Lexington avenue; 119½ S. High street.

JOHN A. SHAUCK,
Lecturer on Supreme Court Practice, Special Cases, etc. — 95 Winner avenue.

J. WARREN SMITH,
Lecturer on Meteorology — 55 Cleveland avenue.

CHARLES LINCOLN ARNOLD,
Assistant in Mathematics — 239 West Tenth avenue.

CHARLES WILLIAM WEICK,
Assistant in the Industrial Department and Foreman of the Carpenter and Pattern Shops — 134 West Eighth avenue.

WILLIAM ABNER KNIGHT,
Assistant in the Industrial Department and Foreman of the Machine Shops — 206 West Lane avenue.

HARRIET TOWNSHEND,
Assistant Librarian — 53 West Eleventh avenue.

KARL DALE SWARTZEL,
Assistant in Mathematics — 57 West Frambes avenue.

THOMAS KENYON LEWIS,
Assistant in Drawing — 68 East Seventh avenue.

(1) CHARLES A. BRUCE,
Assistant in French — 234 West Tenth avenue.

FRANCIS LEROY LANDACRE,
Assistant in Zoology and Entomology — 70 West Tenth avenue.

1 Absent on leave.

JAMES STEWART HINE,
Assistant in Entomology — 117 King avenue.

WILLIAM FINLEY LAVERY,
Assistant in Veterinary Medicine — 1700 Neil avenue.

MAUD DOROTHY JEFFREY,
Assistant Librarian — 65 W. Eleventh avenue.

GERTRUDE STOWELL KELLICOTT,
Assistant Librarian — 1832 Highland street.

(2) CHARLES CONRAD SLEFFEL,
Assistant in Industrial Department and Foreman of the Forge Room — 174 W. First avenue.

ALBERT EARL VINSON,
Assistant in Agricultural Chemistry — Neil and Tenth avenue.

(1) FREDERICK EDWARD KESTER,
Assistant in Physics — 1473 Neil avenue.

JOHN H. SCHAFFNER,
Assistant in Botany — 61 W. Eleventh avenue.

CLARK WISSLER,
Assistant in Philosophy and Pedagogy — 1355 N. High street.

JOHN FERGUSON CUNNINGHAM,
Assistant in Horticulture and Forestry — 1462 Worthington street.

CHARLES BYRON FREDERICKS,
Assistant in Veterinary Medicine — Veterinary Hospital.

(1) HARRY WALDO KIEHN,
Assistant in Mathematics — 221 W. Eleventh avenue.

(3) RAYMOND MOLYNEAUX HUGHES,
Assistant in Clay-working and Ceramics.

MURRAY P. BRUSH,
Assistant in Romance Languages — 532 E. Broad street.

FRANK RUHLEN,
Assistant in Agriculture — 1568 Neil avenue.

LUCY ALLEN,
Assistant in Library — 1490 Neil avenue.

(4) SARAH STUBBS JAMES,
Assistant in Domestic Economy.

ALBERT N. BLEININGER,
Laboratory Assistant in Ceramics — North Dormitory.

NEWTON HENRY BROWN,
Assistant in Physics — 1609 N. High street.

GEORGE WASHINGTON RIGHTMIRE,
Assistant in American History — 1404 Summit street.

EDWARD EVERETT SOMERMEIER,
Assistant in Metallurgy and Meterology — 113 W. Frambes avenue.

DON CARLOS HUDDLESON,
Assistant in Gymnasium — 249 W. Lane avenue.

BURT BIDWELL HERRICK,
Assistant in Cheese-making.

ELISHA SMITH,
Assistant in Cheese-making.

CORNELIA PORTER SOUTHER,
Assistant in Domestic Economy — The Dennison.

FREDERICK WILLIAM SMYSER,
Assistant in Industrial Arts and Forge Master — Seventh avenue.

[1] Absent on leave.
[2] Resigned December 1898.
[3] Resigned September 1898.
[4] Resigned February 1899.

JOSEPH HENRY VOSSKUEHLER,
Assistant in Drawing.

CLAUDE B. GUITTARD,
Assistant in Library — 80 McMillen avenue.

OSCAR ERF,
Student Assistant in Butter-making.

MARION IMES.
Student Assistant in Dairying.

ROBERT FISCHER,
Fellow and Laboratory Assistant in Chemistry — 810 Franklin avenue.

HORACE JUDD,
Fellow and Laboratory Assistant in Mechanical Engineering — 22 W. Woodruff avenue.

FRANK ORVILLE CLEMENTS,
Fellow and Laboratory Assistant in Chemistry — 252 W. Eighth avenue.

MELVIN DURBACH,
Fellow in Anatomy and Physiology — 236 W. Eighth avenue.

FREDERICK T. HALE,
Fellow and Laboratory Assistant in Mechanical Engineering — 239 W. Tenth avenue.

JOHN BERNARD PARKER,
Fellow and Assistant in Rhetoric — 43 W. Woodruff avenue.

FRED ALAN FISH,
Fellow and Laboratory Assistant in Electrical Engineering — 239 W. Eleventh avenue.

EMMA LEANNA BALL,
Fellow and Assistant in Mathematics — 225 King avenue.

ALBERT HEBER McINTYRE,
Fellow in Industrial Arts — 240 W. Eighth avenue.

SAMUEL E. RASOR,
Fellow and Assistant in Mathematics — 22 W. Woodruff avenue.

OLIVER V. BRUMLEY,
Fellow and Assistant in Veterinary Medicine.

BENJAMIN MAAG,
Emerson McMillin Fellow in Astronomy — 164 W. Ninth avenue.

EDWARD L. FULLMER,
Fellow in Botany — 420 W. Eighth avenue.

W. C. MILLS,
Curator of the Archæological Collection — 91 W. Frambes avenue.

EXECUTIVE DEPARTMENT

1898-'99

JAMES H. CANFIELD.....President
ALEXIS COPE.....Secretary Board of Trustees and Bursar
W. C. McCRACKEN.....Chief Engineer
JEAN BLACKFORD.....Executive Clerk
EDITH D. COCKINS.....Registrar
C. E. BARNET.....Accountant
CHARLES LOW.....Assistant Engineer
THOMAS BOUDE.....First Fireman
W. E. CASE.....Second Fireman
JAMES KELLEY.....Lawnkeeper
HENRY MARTZ.....Watchman

JANITORS

ARTHUR CHANTLER.....University Hall
HENRY CHANTLER.....Orton Hall
GEO. W. GOODSPEED.....Chemical Hall
JOHN H. BROWN.....Hayes Hall
GEO. DENNY.....Horticultural Hall and Veterinary Hospital
D. D. GEREN.....Gymnasium
WILLIAM WHITESTINE.....Biological Hall
M. N. COOK.....Townshend Hall

STATE GEOLOGIST.

PROFESSOR EDWARD ORTON.

STATE SEALER OF WEIGHTS AND MEASURES.

THE PROFESSOR OF PHYSICS, *Ex-Officio.*

COLUMBUS, O., June 30, 1899.

His Excellency, HON. ASA S. BUSHNELL, Governor of Ohio:

DEAR SIR: I have the honor to transmit herewith the twenty-ninth annual report of the Board of Trustees, Ohio State University.

Very respectfully,

Your obedient servant,

ALEXIS COPE, *Secretary.*

REPORT OF THE BOARD OF TRUSTEES

OFFICE OF THE BOARD OF TRUSTEES,
OHIO STATE UNIVERSITY,
COLUMBUS, OHIO, *September 1, 1899.*

Hon. Asa S. Bushnell, Governor of Ohio:

Sir:—In complinance with law the Board of Trustees respectfully submits the twenty-ninth annual report of the Ohio State University, it being for the year ending June 30, 1899.

ENDOWMENT.

The part of the irreducible debt of the state which forms the endowment of the University was, at the date of the last annual report, June 30, 1898, $550,469.27, on which the annual interest was $33,028.15.

Under operations of the act of the General Assembly of March 14, 1889, entitled "an act to quiet title to unpatented lands in the Virginia Military District of Ohio," the following sums were added thereto: Sept. 10, 1898, $38.47; Nov. 4, 1898, $0.90; Dec. 9, 1898, $46.55; Feb. 1, 1899, $109.23; March 1, 1899, $750.47; March 8, 1899, $213; April 10, 1899, $578; May 4, 1899, $250; June 14, 1899, $161.77; total for the year $2,148.39, making the endowment fund June 30, 1899, $552,617.66, on which the annual interest is $33,157.06.

THE WILLIAM J. BRYAN PRIZE.

In April, 1898, the Hon. William J. Bryan, in a letter addressed to the President of the University, made a proposition "to give to the University, if agreeable to the trustees, $250, the same to be invested and the proceeds used as a prize for the best essay discussing the principles which underlie our form of government."

The Trustees promptly expressed their willingness to receive such gift and their appreciation thereof, and Mr. Bryan a few weeks later forwarded a draft for the amount.

On July 20, 1898, in pursuance of the provisions of Section 4105-15 of the Revised Statutes of Ohio, said sum was certified into the state treasury and became a part of the irreducible debt of the state.

The prize during he past year not having been awarded, the interest on the sum to June 30, 1899, will, under the operation of Section 4105-15, above quoted, be added to the principal, which will make the sum June 30, 1899, $264.40, upon which the annual interest is $15.86.

RECEIPTS AND DISBURSEMENTS.

RECEIPTS.

Interest on endowment	$33,064 84	
State levy	176,058 15	
Sale of refunding bonds	10,797 75	
Appropriation act of Congress, 1890	24,000 00	
Students' fees	28,007 45	
Store room cards	2,050 00	
Sales store room supplies	224 00	
Rents	1,142 50	
Cash donations department economics	375 00	
Emerson McMillen Fellowship in Astronomy	300 00	
N. B. M. A. Scholarship	250 00	
Overpayment of interest returned	562 50	
Sale and exchange books, College of Law	309 00	
Virginia Military Lands	226 62	
Sale Sup. Department Ceramics	115 83	
Miscellaneous receipts	89 42	
		$277,573 06

DISBURSEMENTS.

Salaries	$145,909 12	
Expenses of trustees	712 70	
Repairs	8,697 40	
Fuel and light	8,570 28	
Library	6,392 64	
Printing and advertising	2,328 70	
Virginia Military lands	1,038 99	
Roads and grounds	2,591 22	
Bonds and interest	53,150 00	
Apparatus	20,718 50	
Laboratory supplies	6,605 59	
Equipment Townshend Hall	1,041 79	
Townshend hall	528 70	
Water rents	1,141 29	
Attorney fees Page will case	1,000 00	
Postage	521 28	
Telephone service	394 68	
Telegrams	28 96	
Agricultural Students' Union	44 22	
Rent fire alarm boxes, etc	175 68	
Insurance	198 99	
Commencement expenses	299 45	
Oils	381 00	
General supplies, cleaning materials, etc	182 93	
Furniture	154 40	
Freight and cartage	36 77	
Expenses visiting high schools	132 06	

Messenger service	307 69	
Blank books and stationery	337 13	
Athletic field	151 74	
Fees refunded to soldiers Spanish war	98 25	
Collections of Odonata	300 00	
Collection of Birds (Davie)	400 00	
Archæological collection (Moorehead)	300 00	
Tools and machinery	1,634 13	
Live stock	175 25	
Feed	762 06	
Seeds and plants	114 53	
Incidentals	431 54	
Overdraft year ending June 30, 1898	495 36	
		$268,485 02
Balance in hands of treasurer June 30, 1899		$9,088 04

NEW MORRILL FUND.

The following statement shows the receipts and disbursements for the year ending June 30, 1899, of appropriations made by act of Congress, approved August 30, 1890, and known as the "New Morrill Fund," and which are included in the preceding statement of the aggregate receipts and disbursements.

RECEIPTS.

Balance in treasury June 30, 1898	$267 42	
Appropriation year ending June 30, 1899	24,000 00	
		$24,267 42

DISBURSEMENTS.

For instruction and facilities in agriculture	$5,218 51	
For instruction and facilities in mechanic arts	8,062 83	
For instruction and facilities in English language	754 29	
For instruction and facilities in mathematical science	1,555 71	
For instruction and facilities in nat'l or phys. science	7,976 33	
For instruction and facilities in economic science	662 44	
		$24,230 11
Balance June 30, 1899		$37 31

The law of Congress requires a detailed annual report of the receipts and disbursements of this fund, which report for the year ending June 30, 1899, is appended to the treasurer's report filed herewith.

VIRGINIA MILITARY LANDS.

To June 30, 1898, the total receipts from the sale of the Virginia Military Lands granted to the University by act of the general assembly of March 26, 1872, were	$65,168 66	
The receipts from this source during the year ending June 30, 1899, were	226 62	
		$65,395 28

The expenses incident to the survey and disposition of such lands to June 30, 1898, were.....	22,960 10	
Such expenses for the year ending June 30, 1899, were..	1,038 99	
		$23,999 09
Leaving net cash receipts to June 30, 1898.....		41,396 19
Of this sum there has been paid to the credit of the endowment fund	13,665 14	
And expended for building and maintaining residences for the professors under act of April 17, 1882.....	20,052 51	
		$33,717 65
Leaving balance June 30, 1899.....		$7,678 54

The receipts and disbursements of this fund for the year ending June 30, 1899, are included in the preceding general account of the aggregate receipts and disbursements.

ADDITIONS TO ENDOWMENT.

For the period ending June 30, 1898, the additions to the endowment fund under the operations of an act of the general assembly of March 14, 1889, entitled "an act to quiet title to unpatented lands in the Virginia Military District of Ohio," the act of April 21, 1893, entitled "an act for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," an act amendatory of said last mentioned act passed May 21, 1894, and an act passed April 26, 1898, entitled "an act making appropriations for the relief of certain persons who formerly held lands in the Virginia Military District of Ohio," were $12,627.83.

During the year ending June 30, 1899, under the operations of said first mentioned act, there was added to said endowment fund the sum of $2,148.39. Making total additions to the endowment fund under said acts, $14,776.22.

The suits mentioned in former reports which grew out of a contract made with the late Mr. Sam Kendrick in 1882, for the discovery of undiscovered lands in the Virginia Military District of Ohio, are still undisposed of.

One of them, the case of N. W. Evans against the Board of Trustees, which was a suit for $5,000 attorney fees for services claimed to have been performed under direction of said Kendrick, was tried in January, 1898, and was decided in favor of the University.

The plaintiff has, however, carried the case to the Circuit Court of Franklin county, where it is still pending.

The other suit, the case of Sam Kendrick against the Board of Trustees, a suit for the sum of $133,000, with interest from June 19, 1889, has never been tried. After Mr. Kendrick's death in December, 1892, the suit was revived in the name of his administrator and is still pending in the Common Pleas Court of Franklin county.

BONDED INDEBTEDNESS.

The bonded indebtedness of the University June 30, 1898, was $380,000, due and payable as follows: $25,000 Dec. 1, 1898; $10,000 June 1, 1899; $55,000 Dec. 1, 1899; $10,000 June 1, 1900; $55,000 Dec. 1, 1900; $10,000 June 1, 1901; $55,000 Dec. 1, 1901; $10,000 June 1, 1902; $55,000 Dec. 1, 1902; $10,000 June 1, 1903; $55,000 Dec. 1, 1903; $10,000 June 1, 1904; $10,000 Dec. 1, 1904; $10,000 June 1, 1905.

Of this indebtedness $70,000 bore interest at six per cent. and $310,000 at four and one-half per cent. per annum, payable semi-annually. The $25,000 of said indebtedness falling due Dec. 1, 1898, was paid when due and the bonds taken up and cancelled.

Under and pursuant to the provisions of an act of the general assembly entitled "an act to authorize the trustees of the Ohio State University to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due," passed April 23, 1898, the $10,000 of 6 per cent. certificates of indebtedness falling due June 1, 1899, were taken up by an issue of the same amount of four and one-half per cent. bonds falling due, $5,000 Dec. 1, 1904, and $5,000 Dec. 1, 1905. Said bonds brought a premium of $797.75, which reduces the annual interest thereon to about three per cent.

Said reduction of principal and interest left the bonded indebtedness June 30, 1899, $355,000, of which $295,000 bears interest at four and one-half per cent. and $60,000 at six per cent. per annum, payable semi-annually.

Said remaining indebtedness falls due as follows: $55,000 Dec. 1, 1899; $10,000 June 1, 1900; $55,000 Dec. 1, 1900; $10,000 June 1, 1901; $55,000 Dec. 1, 1901; $10,000 June 1, 1902; $55,000 Dec. 1, 1902; $10,000 June 1, 1903; $55,000 Dec. 1, 1903; $10,000 June 1, 1904; $15,000 Dec. 1, 1904; $10,000 June 1, 1905; $5,000 Dec. 1, 1905.

THE PAGE WILL.

In former reports mention has been made of the will of the late Hon. Henry F. Page, of Circleville, in which he devised certain farming lands in Ohio and Illinois (near 1,000 acres in each state) estimated to be worth $150,000, to the Ohio State University, subject to life estates therein to his widow, Mrs. Charlotte G. Page, and his only child, Isabel Page.

The will provided that in the event of the testator's death within a year, and the consequent failure of the devise to the University, the estate, after the death of the widow and daughter, should go to certain children of his two brothers. By a subsequent provision of the will the testator requested his daughter Isabel to ratify and confirm the devise to the University and provided in case she complied with such re-

quest that the devise to the said children of his brother should thereby be revoked. Mr. Page died within a year from the making of the will and his daughter Isabel formally ratified and confirmed the devise to the University and by deed duly executed, conveyed to it the lands so devised.

Isabel subsequently died and suit was filed in both Ohio and Illinois to set aside the deed of ratification and confirmation.

The case in Ohio was carried to the Supreme Court and decided in favor of the University, the court holding that the deed of ratification, whether valid or invalid, revoked the devise to the children of testator's brothers, and that they have no claim under the will.

After said decision of the Supreme Court the widow of the testator, Mrs. Charlotte G. Page, sent a communication to the trustees, expressing a desire to release to the University any interest she might have in the lands mentioned in the devise, over and above the life estate provided for her in said will, and afterwards duly executed and delivered to the board of trustees her quit claim deed for such interest, which deed was duly recorded in the counties in which the lands lie.

Thereupon the trustees formally released to Mrs. Page, during her life, all claim of the University to one-half of the income of said lands from the date of her daughter Isabel's death, and also formally requested the executors of Henry F. Page to pay to Mrs. Page the sum of $1,732.26, the amount found in their hands on final settlement of his estate, for the purpose of providing a monument for her deceased husband.

Mrs. Page died shortly after the execution of the instrument before mentioned, and by the terms of said will the title to the lands and the income thereof vested in the University.

Notwithstanding the decision of the Supreme Court above mentioned, the collateral kindred of Mr. Page still assert a claim to the lands and a portion of the income thereof, and the trustees under the will filed a suit in the Common Pleas Court of Pickaway county setting up the conflicting claims of the parties in interest and asking the court's decision thereon. Said suit is still pending.

In the meantime, Mr. John G. Haas, one of the trustees under the will, has been appointed receiver and is managing the lands and collecting the rents and holding them until the determination of such suit.

CAMPUS.

During the fiscal year just closed the sum of $2,591.22 was expended in caring for the campus — $1,180 having been used in constructing an artificial stone walk from the armory and gymnasium to the main building, or University Hall, and the balance in grading about the newer buildings and in keeping the grounds, drives and walks in order.

To repeat what was said in the last annual report: "Much remains to be done to carry out the plans of the landscape gardner and put the grounds in symmetrical shape." "A number of additional walks and driveways are needed."

"The plans contemplate a botanical garden and arbortem, and it seems practicable to soon begin this work. It will take time and a considerable outlay, but the comparatively small sums which have been and will continue to be expended from year to year, will soon make the University grounds among the most attractive in the State."

"The trustees again express the hope that some public-spirited citizen will provide the funds for a gateway arch at one of the entrances to the University grounds, and in so doing build for himself an enduring monument."

THE LIBRARY.

The expenditures for the library for the year ending June 30, 1899, exclusive of the salaries of the librarian and assistants, were $6,392.64. Of this sum $804.78 was paid for furniture and current supplies; $720.70 was paid for binding and the remainder, $4,867.16, was expended in the purchase of books and periodicals.

The report of the librarian shows that the whole number of accessions during the year was 7,660. Of this number 2,643 were purchased and 5,017 donated. Of the books donated, over 3,000 were public documents secured through the continued interest of President McKinley in the growth and progress of the University.

A large number came through the efforts of the University Library Association, and many were received through the liberality of private donors.

Hon. Hylas Sabine presented the library with some 200 volumes, some of which had once belonged to Daniel Webster and bear his autograph. Due acknowledgement for these gifts is made elsewhere in this report.

The number of books in the library June 30, 1898, was 23,339; the number of pamphlets approximately 7,000.

The number of books June 30, 1899, was 30,999, and of pamphlets about 7,000 — the addition to the number of pamphlets about equalling those bound into volumes. The report of the librarian is so important that it is filed herewith.

COLLEGE OF LAW.

When the School of Law was established in 1890 it was with the understanding on the part of the Board of Trustees that it should be self-supporting, and until the year 1894 its professors and teachers received no other compensation than the small sum received as fees from the students.

Mr. Emerson McMillin generously gave $3,000 for the purchase of books and the late Hon. Henry C. Noble by his will bequeathed his valuable law library. In 1894 the legislature, unasked by the Trustees, passed an act authorizing an appropriation from the state levy of a sum not exceeding $5,000 annually for its support and maintenance. The Trustees interpreting such action by the legislature as a desire on its part that a sum additional to the fees of its students should be expended for its benefit, annually, until 1897, appropriated the sum of $1,500 in addition to the fees, which sum was expended towards meeting the salaries of teachers and lecturers.

For the year ending June 30, 1898, this appropriation was omitted, and the fees received from the students paid all expenses of the college and left a surplus of $700.

During the year just closed the only support was from the fees of its students, and the excees of receipts over expenditures was $1,707.

The college has constantly grown in popularity and usefulness and at the same time has maintained so high a standard of work that its graduates easily hold first place in the examinations before the Supreme Court.

During the past year the faculty, with the approval of the trustees, has materially raised the requirements for admission, to take effect in the year 1901.

DEGREES.

At the commencenment in June, 1899, on the recommendation of the faculty, the following degrees were conferred:

ADVANCED DEGREES.

MASTER OF ARTS.

Frank Brown, A. B. (Macalester College) Columbus; Edward Duncan Meek. B. A., Glencoe; Willam Rufus Kersey, B. A. (Earlham College) Columbus.

MASTER OF SCIENCE.

Frank Orville Clements, M. A. (Otterbein University) Westerville; Horace Judd, M. E., Columbus; Benjamin Franklin Maag, B. Ph. (Wooster University) Mt. Eaton.

MASTER OF SCIENCE (In Horticulture and Forestry).

John Ferguson Cunningham, B. Sc. (H. & F.), Columbus.

FIRST DEGREES.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

BACHELOR OF SCIENCE (In Agriculture).

Arthur Grant Abbott, Medina; Oscar Erf, Monroeville; Clarence Alfred Clawson, Okeana; Marion Imes, Bashan; Frederick Symmes Johnston, Ashtabula.

BACHELOR OF SCIENCE (In Horticulture and Forestry).

Leonard C. Warden, Avon.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

BACHELOR OF ARTS.

James Herbert Brandt, Greencastle; Walter Converse, Plain City; Paul Revere Good, Westerville; Robert James King, Zanesville; Susan Esther Rice, Columbus; Frank Persons Rogers, Columbus; Ralph Oliver Spencer, Columbus; Charles Leslie Stimson, Columbus.

BACHELOR OF PHILOSOPHY (Latin Course).

Harrison William Bock, Canton; Dorothea Frances Canfield, Columbus; Lillian Stuart Huffman, Columbus; Burch Delaplaine Huggins, Hillsboro; David Thatcher Keating, Columbus; Dallas Gypsi Lisle, Columbus; Leslie Mac Lisle, Columbus; Carey Ligouri Logsdon, Columbus; Wilber Edwin Mann, Morrisville; William Waddle Richardson, Massillon; Simeon Andrew Roach, Chillicothe; Philip Emerson Ward, Willoughby; John Wesley Young, Columbus.

BACHELOR OF PHILOSOPHY (English Course).

Elizabeth Grant Baldwin, Columbus; Harry Ernest Clum, Westerville; Ida Mae Coursault, Columbus; Thomas Herbert Dickinson, Columbus; Francis William Gruen, Cincinnati; Charles Pearl Harris, West Liberty; Frederic Roland Hoover, Columbus; John Wesley Lehman, Canal Winchester; Herbert C. Mundhenk, Brookville; Gertrude Belle Nichol, Columbus; Maud Raymond, Columbus; George A. Robbins, Columbus; Mary Fannie Rockwell, Columbus; William Ralph Sprague, Columbus; Carl Eckert Steeb, Medina; Edwin Slusser Wertz, Dalton; Anna Ernestine Williams, Jackson; Wood Frank Worcester, Columbus.

BACHELOR OF SCIENCE.

Ruth Mundhenk, Dayton; Henry Lewis Rietz, Gilmore.

COLLEGE OF ENGINEERING.

CIVIL ENGINEER.

Clarence Julian Clarke, Wilberforce; Levi Rawson, Lisbon; Carlton Elijah Stone, Gallipolis; Leigh Goodrich Curtis, Hamilton; Louis Philip Wirthwein, Columbus; David William Smith, Ashland; Clarence Milton Sprague, Summerford.

MECHANICAL ENGINEER (In Electrical Engineering).

John H. Hertner, Dayton; Marcellus Staley, Dayton; John Theodore Frankenberg, Columbus; Joseph Farist Green, Dayton; Jesse Joseph Linebaugh, Pleasant Corners; Daniel Karl Starbuck, Barnesville; John Martin Schreiber, Ironton.

MECHANICAL ENGINEER.

Warren Atkinson, Greenville, S. C.; Robert Jewett Pabodie, Wyoming; Harry Goldsmith Bygate, Steubenville; Herman Gamper, Columbus; Arthur Huntington, Columbus; Kerson Nurian, Philipopolis, Bulgaria.

ENGINEER OF MINES.

John Wallace Bischoff, Elk Garden, W. Va.; James Francis Brophy, Frostburg, Md.; Charles Hill Tufts, Maineville.

BACHELOR OF SCIENCE (In Chemistry).

Samuel Vernon Peppel, Leetonia.

COLLEGE OF LAW.

BACHELOR OF LAWS.

Edward Harrison Allen, B. A. (Ohio Wesleyan University), Lena; John Gustave Austin, Sparta; Harry Graham Bockius, Ph. B. (Yale University), Canton; Charles Grosvenor Bond, Columbus; Charles Reed Brewer, Bowling Green; Alexander B. Clark, A. B. (Yale University), Canton; John Randolph Dally, Centerburg; George Edwin Davidson, East Liverpool; Warren Noble Groff, B. A., Tiffin; Reed Haskell Game, B. Ph., Canal Winchester; Francis William Gruen, Cincinnati; Arlington Coryville Harvey, M. A., Columbus; Irwin G. Jennings, Zanesville; William Emil Krupp, Uhrichsville; Walter Edwin Orton, Williamstown, Mass.; Edward Livingstone Pease, B. A., Columbus; Hugo Nathan Schlesinger, Xenia; Warren Lee Smith, Columbus; Charles Franklin Sprague, B. A., Wapakoneta; Thomas A. Stiger, Bucyrus; Andrew Lee Roy Wildermuth, Columbus.

THE FACULTY.

The most notable change in the faculty during the past year was the retirement of President James H. Canfield, to accept the position of Librarian of Columbia University, New York.

On the 9th day of May, 1899, President Canfield tendered his resignation, to take effect June 30, 1899, and the same was accepted, and on the 13th day of June, following, William Oxley Thompson, D. D., was elected as his successor.

Other less notable changes in the faculty are noted in the report of the President and in the annual catalogue for the year ending June 30, 1899, which are filed herewith and made a part of this report.

The number of professors in the academic faculty is 30; associate professors, 9; assistant professors, 14; assistants, 28; lecturers, 1; fellow and laboratory assistants, 13; librarians, 1; assistant librarians, 5; curators, 1. Their positions and compensation and that of the other employes of the university, are stated elsewhere in this report.

The law faculty consists of the Dean, four professors and three lecturers, whose compensation is also given in another part of this report.

NUMBER OF STUDENTS.

The enrollment of students during the year was as follows:

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE AND COLLEGE OF LAW.

First semester, 524; second semester, 503.

OTHER COLLEGES.

Fall term, 496; winter term, 487; spring term, 410.

The whole number in attendance during the year, as shown by the catalogue, including those in attendance at the summer school, was 1,149.

The numbers in the several colleges, departments and classes, and the courses of study pursued in each, are shown in the appendix to the President's report and in the catalogue filed herewith.

GIFTS DURING THE YEAR.

Besides those especially mentioned in the preceding pages of this report, the University has received by gift the following additions to its museums and collections:

DEPARTMENT OF ECONOMICS AND SOCIOLOGY.

Business men of Columbus for Department Equipment, $1,225.

M. A. Hanna, Carroll D. Wright, Emerson McMillin, J. B. Breese, Columbus Dispatch, Government Bureau, etc., books.

Ira A. Richards, R. Hirsch, H. Slesinger, M. Munsey and others, coins.

J. Seligmann & Co., Columbus Bank Note Co., Franklin Lee Printing Co., Security Bank Note Co., Alexis Cope, American Express Co. Columbus Street Railway Co., Deshler National Bank, Sessions & Co., New York Life Insurance Co., and others, business paper.

ELECTRICAL DEPARTMENT.

Western Electric Co., Van De Poele dynamo, historical.

Westinghouse Electric and Manufacturing Co., collection of photographs.

General Electric Co., collection of photographs.

The Akron Electrical Mfg Co., collection of photographs.

H. B. Brooks, Edison ammeter, historical.

DEPARTMENT OF HISTORY AND POLITICAL SCIENCE.

Through the interest of President McKinley, a complete set of the "Public Documents of the United States," embracing between three and four thousand volumes.

DEPARTMENT OF HORTICULTURE AND FORESTRY.

The Deming Co., Salem, O., one Kerosene Knapsack Sprayer.

The Robert Douglas Co., Waukegan, Ill., collection of 25 specimens of ornamental evergreens.

Prof. S. B. Green, Department of Horticulture, University of Minnesota, a collection of about 30 specimens of ornamental trees and shrubs.

DEPARTMENT OF INDUSTRIAL ARTS.

From the Morse Twist Drill and Machine Co.:
One ¾ in. Hollow Drill.
One ½ in. Straightway Drill (straight shank).
One ⅝ in. Straightway Drill (taper shank).
One 1 in. Expanding Shell Reamer.
From the Hampden Corundum Wheel Co., one small emery wheel.
From the Fitchburgh Machine Co., The Niles Tool Works, Brown & Sharpe, Warner & Swasey, The Pond Machine Co., The American Tool Works Co., pictures of machine tools for the walls of the shops.
From Hayden's Foundry, a sample of cast iron grafting.
Nicholson File Works, a book of files.
From different Companies, drawings and tracings.

DEPARTMENT OF ZOOLOGY AND ENTOMOLOGY.

S. H. Scudder, Lawrence Bruner, J. B. Smith, M. V. Slingerland, F. M. Webster, H. Osborn, E. P. Felt, U. S. Department of Agriculture and Otto Lugger, entomological papers.
Pletch & Sutton, two sharks.
Professor Bownocker, Pacific Coast starfish.
Sells Bros., tiger, deer, lion.
E. E. Mastermann, skulls and small mammals.
W. C. Munsey, Porto Rican centipede.
Sells Bros., two cockatoos.

DEPARTMENT OF MINING ENGINEERING.

T. E. Hughes, of Philadelphia, Pa., set of Reports of the Pennsylvania Geological Survey.

ESTIMATES.

The following are the estimates for the year ending June 30, 1900:

Salaries	$151,055 00
Bonds and interest	41,875 00
Expenses of trustees	600 00
Fuel and light	8,000 00
Power and light plant, repairs, etc	4,000 00
General repairs	5,000 00
Printing and advertising	2,500 00
Roads and grounds	2,400 00
Virginia Military lands	2,000 00
Water rents	1,400 00
Library	6,000 00
Store room supplies	5,000 00
Department apparatus and supplies	25,000 00
Incidentals	4,000 00
Total	$258,530 00

Which will be amply met by the anticipated income of the University.

The reports of the President, the Librarian and the Treasurer for the year ending June 30, 1899, are filed herewith and made a part of this report.

Respectfully submitted,

ALEXIS COPE,
Secretary.

REPORT OF THE PRESIDENT

To the President and Members of the Board of Trustees:

Gentlemen:—The University year just closing has been marked by unusually quiet and steady work in all departments. The completion of our buildings, and the restoration of the campus to its normal condition, has brought relief to the nerves of both the Faculty and the students; and the swing and stride of University life has been practically unbroken during the year. Not for some time has all work been so efficient and have all results been so satisfactory.

In spite of the fact that a large proportion of those who would ordinarily enter this institution at the opening of the University year, entered the service of the United States instead, that most of our students who enlisted in the Spanish-American war did not return in time to re-enter the University, that the last Summer School was attended by the smallest number known since this school was instituted, and that again pressure was brought to bear upon the State High Schools in the way of increased demands (in both the quantity and quality of their work) and by more rigid adherence to University requirements, the enrollment for the academic year shows a very gratifying increase — about ten per cent. over that of last year, in the regular University work. The hold of the University upon the confidence and good will of the state is shown by the fact that these students come from every rank in society — as appears by the very interesting page of information as to the occupations of the parents, to be found near the close of the catalogue, and as appears also by the fact that only three counties in Ohio are now without representation.

DEGREES CONFERRED.

At the last commencement the following degrees were granted:

Master of Arts, three; Master of Science, four; Bachelor of Science, nine; Bachelor of Arts, eight; Bachelor of Philosophy, thirty-one; Civil Engineer, seven; Mechanical Engineer (in Electrical Engineering), seven; Mechanical Engineer, six; Engineer of Mines, three; Bachelor of Laws, twenty-one; total, ninety-nine.

CHANGES IN THE FACULTY.

The changes in the instructional force during the year have been confined, fortunately, to those known as minor instructors. Assistant Director of Ceramics, Raymond M. Hughes, was called to an independent position at Miami University almost at the opening of the year. At the middle of the year Assistant Charles C. Sleffel received and accepted a very flattering call to Columbia University, New York City; and at the close of the year Assistant Charles W. Weick transferred to the same institution. Assistant N. H. Brown withdrew at the close of the year to accept a call to the Chair of Mechanical and Electrical Engineering at Delaware College, Newark, Delaware. Because of the return of the gentlemen during whose leave of absence they were serving, Assistant Professor Edward M. Van Harlingen and Assistant Murray P. Brush, do not return next year. The latter has received a call to Johns Hopkins University. Assistant Frederick W. Smyser withdrew just after our last commencement to accept a more attractive position in the east.

There have been the usual changes in the Fellows and Laboratory Assistants.

The appointments for the coming year include Charles Smith Prosser, M. S., as Associate Professor of Historical Geology; William Edwards Henderson, as Assistant Professor of Analytical Chemistry; Edwin D. Shurter, Assistant Professor of Rhetoric and Public Speaking; George H. McKnight, as Assistant Professor of Rhetoric and English Language; John Bell Sanborn, as Assistant in American History and Political Science; Silas Martin as Assistant in Drawing, and the usual appointments of Fellows and Laboratory Assistants.

By advancement in title you recognized the faithful and acceptable services of George W. McCord, made Associate Professor of Mathematics; Charles W. Mesloh, made Assistant Professor of Germanic Languages; John A. Bownocker, made Associate Professor of Inorganic Geology; Charles A. Bruce, made Assistant Professor of Romance Languages; Charles L. Arnold, made Assistant Professor of Mathematics; Karl D. Swartzel, made Assistant Professor of Mathematics; Charles H. Schaffner, made Assistant Professor of Botany; Fred A. Fish, advanced from the position of Fellow and Laboratory Assistant in Electrical Engineering to the position of Assistant in the same department; and Oliver V. Brumley, advanced from the position of Laboratory Assistant in Veterinary Medicine to the position of Assistant in the same department. Assistant Professor J. R. Taylor has been transferred to the Department of English Literature, and thus given full time for the work for which he seems particularly prepared.

THE PRESIDENT-ELECT.

The most noteworthy appointment made by the Board within the year is that of Rev. William Oxley Thompson, D. D., as President of the University. President Thompson comes to this institution admirably fitted for the responsibilities of the position. He is an Ohioan by birth and by education. His broad and intelligent sympathy with all the educational work of the state has put him in close touch with the best and most advanced teachers of the commonwealth. He has breadth of vision, a willingness to co-operate with others, good common sense (the most uncommon of the senses), and above all he has a distinct Christian character, combined with moral courage and a generous and intense nature.

Taking up his work with the hearty co-operation of the Board of Trustees, and with a hold upon the confidence of the best citizens of the State already assured, there can be no question as to the success of his administration.

UNIVERSITY ATHLETICS.

Although the Athletic Board has been organized little more than a year, yet enough has been accomplished to prove that its conception was a step in the right direction. Under its administration not only have the financial affairs of the Association been conducted in a business-like way, but the general interest in honest college sports among the student body has been greatly increased. Believing that the benefit to be derived from athletic games comes to those who participate rather than to those who simply look on, the Board has in every way encouraged "home" contests, as inter-class games, inter-fraternity games, etc.

The most serious obstacles with which we have had to contend is the lack of finances for carrying out the work. The legitimate expenses which any Athletic Association must meet in order to train and equip its teams for inter-collegiate contests, can only be understood by those who have been connected with such Associations. As a result, with the exception of a few of the larger Universities, where the interest in athletics is intense, Athletic Associations have a constant struggle to keep out of debt. In our own efforts to do this we are greatly indebted to the young women of the University, who, under the leadership of Miss Bowman and Miss Elliott, have kindly given very successful entertainments for the benefit of the Association. But here is a field in which our Alumni ought to work strenuously, and in which they could work very helpfully.

Finally, it is idle to suppose that the local board can meet its nessessary expenses, and in addition improve the athletic field to any great extent. We are sadly in need of a grand-stand, of bleachers, and of

a suitable out-door running track. Because of the lack of the latter, it has not been possible for us to hold a track athletic meet this year, although it is exceedingly desirable to encourage this sort of physical exercise. I sincerely hope that the Alumni will raise sufficient funds for the construction of a suitable track at least. Or the Trustees might construct a track if the Alumni will put up a grand-stand and bleachers. There ought to be some steps taken at once to bring about efficient co-operation between these two bodies.

MUSIC IN THE UNIVERSITY.

During the entire course of my administration here, I have strongly desired to advance the musical interests of the University. It will be some time, probably, before definite and higher instruction in this subject can be given by this institution; with usual and proper credits for the same — such a course as is known in Harvard or in the University of Michigan. The fact that most of the students likely to be interested in musical study are residents of Columbus, and have certain *local* advantages in the way of proper instruction, might operate against the success of such University electives; but I believe there is a quite well defined demand for such a department, and it is certainly time that the Trustees were beginning to consider this subject.

Something might be done at once in the way of appropriating a small amount of money each year for chorus training and orchestra work. We have some very good voices in the University, which combine well under training, and without doubt there are latent powers that could be developed. Under a competent instructor our students are quite capable of mastering the shorter choral works, and of presenting these to the public with entire credit to the University. Somewhat similar conditions exist as to orchestra work.

With definite recognition of this work; with a chorus meeting at four o'clock on Tuesday afternoons, and an orchestra meeting at four o'clock on Thursday afternoons — each under competent instruction; and with a good organ in the Chapel, which would be a great stimulus to musical feeling among both students and Faculty, the University would take a long step forward in this most delightful and inspiring art, and would be more than repaid by the advancement of its students in true culture, and by the enlargement and quickening of University spirit which must certainly result.

YOUNG WOMEN AT THE UNIVERSITY.

One crying need of our University life is some means of caring for our young women. This year there have been about sixty young women — not residents of Columbus — and the number is increasing

rapidly. These must find homes among a shifting class of boarding-house keepers, most of whom, unfortunately, have rarely had either special training for their vocation or much experience in it, and are following it simply as a means of livelihood. The number of girls coming to the University from abroad has been too small to cause much competition among these purveyors. There is little effort made to please young women at table; the parlor is not always attractive and is sometimes grudgingly granted for entertaining friends; the health of the boarders is often a matter of indifference; intelligent and sympathetic chaperonage is very rarely considered, and the general result is a body of young women straining the mental and physical powers to the utmost and with no one sufficiently interested or informed to warn them of indiscretions with regard to either health or general well-being.

Other colleges and universities have found it expedient, indeed necessary, to provide halls or dormitories for their women students. These buildings are often so crowded that applications for rooms must be made two or three years in advance. At Chicago University the five halls provided for women have been almost the only paying investment, undergraduate women, and even those doing advanced work, preferring such a home to the outside rooms.

A building which would accommodate perhaps forty women would do much to increase the popularity of the University with mothers, and with the public generally. It would make a very desirable center for much University life. It ought to bring to the University a touch of home life which is now quite lacking. Professors and their wives would gladly come into more personal touch with students if it were possible; and a hall for women might serve a double purpose, being both a social and a working home. A keen interest is now manifested in dietaries for hospitals and armies. Sanitation was never before so much appreciated. Our Department of Domestic Economy is anxious to make its work practical as well as theoretical. A woman's hall would prove a valuable storehouse from which to draw material for a thesis and advanced work, along dietetic, sanitary, hygiene and artistic lines.

Another need of our young women is rest-rooms in the various buildings. There is in University Hall one large room where the girls are supposed to have full sway. It meets the requirement as an assembly room, but it lacks some important requirements for rest. It is usually noisy, and often crowded. The one small room, fitted up in Townshend Hall at a trifling expense, is most constantly in use, and the girls are enthusiastic concerning it. Many of our women students are on the grounds from eight o'clock in the morning until four or five in the afternoon. They could do infinitely better work were they able to secure even ten minutes' absolute relaxation during the day, in some perfectly quiet place. Our sympathies go out to the shop girl who is employed all day, and philanthropy has attempted much to re-

lieve the pressure under which she works; but in contrast with shop girls, who may usually call the evening their own, our college girls go home to spend several hours more on preparation for the next day's work. It is not fair to say, "If women cannot endure University work under present and usual conditions, let them go elsewhere." Most of them can endure University work, heavy work, and do endure it, but care is at times necessary.

The disposition of the woman is different from that of the man; the nerves are usually high strung; but if these characteristics are understood and provision made accordingly, there is little reason why University life should impair the health of the average girl. And one thing necessary is for some place where she may relax utterly for a short time, and where she may be cared for if suddenly taken ill. So strong have I felt this pressure to be that I have more than once given my private office for such purposes. These two concessions certainly need not affect the routine of the University and would prove a boon to our students.

A third demand, which will become more apparent (though it will be hardly more imperative) when there is a building for women, is for some woman who may devote much of her time to the welfare of the girls, and to whom they may feel free to go for advice concerning all things.

Could these three suggestions be met, the popularity and promise of this University would be greatly enhanced and the usefulness would be wonderfully increased. Our young women must be carefully and intelligently considered in the great scheme of public education. Anything which goes to make them more womanly, and which tends to develop their physical, mental and moral natures into a harmonious whole, is worthy of consideration, by both educators and administrators.

THE COURSES IN DOMESTIC SCIENCE.

As to the educational value of the course in Domestic Science: As all work in this department is something of an innovation, I am particularly anxious in this, my last report, to put you in possession of the grounds upon which I have recommended its adoption. No such question can be intelligently discussed except in the light of a definite theory of education — as to the purposes which education aims to accomplish. If education be, as some conceive it, intended entirely for the knowing side of a man; if it be proper for educational purposes to regard the human being as a sort of disembodied spirit, with no body to take care of, with no children to train, with no duties to perform except to itself, and none to itself except as a purely intellectual being; then such a course is an absurdity. If again education be intended primarily for the development of the æsthetical side of human nature, to develop

its capacity to appreciate the art and the literature of Greece and Rome or of later periods; then from this point of view also such a course is entirely without a place in the program of a liberal education.

But if the deepest and most significant thing about life is action, if the function of education is to help men to do more wisely and intelligently everything they have to do, if it is to enable its possessor to apply to all the work of life the utmost intelligence possible in a being with his natural capacity, then such a course is worthy of your constant and fostering care. The fact is that education is intended to touch life at every point, to help men to do not *some* things more wisely than they otherwise could be done, but to help them to do *all* the things that they have to do with the utmost intelligence possible. If history teaches anything, it teaches this, that the rightful sovereign over every department in life is knowledge. For those who admit the truth of this conception, it would seem that scarcely anything would need to be added respecting the propriety of instruction in Domestic Science. The primary purpose of such a course is to help the students to apply the most advanced knowledge to those parts of life that center especially in the home; to enable them to eat and drink more wisely, to live more wholesomely, and to find far more in life than many of them now find; to enable them to train their children more intelligently; in a word, to take those parts of the curriculum which contain principles which may be made to bear upon the life of the home, and make them yield everything that they can yield of a helpful character in this direction.

If the question is ever again raised as to the educational value of the course in Domestic Science, that question is answered if you agree that education consists in preparation for rational life; if you agree that education consists in the possession of that kind of knowledge and development, of that kind of training, which will enable one to live wisely in the broad and full sense of those words. It is not claimed that the course in Domestic Science will enable one who takes it to do all forms of the work of life wisely and rationally. It is simply claimed that the mental training and knowledge derived from such a course will enable the possessor to do intelligently, efficiently and wisely, what otherwise would depend upon mere tact, untrained tact, and largely upon imitation — and imitation of rather poor and weak originals.

AMERICAN HISTORY AND POLITICAL SCIENCE.

The experience of the United States during the past year, and the political governmental problems now pressing upon the country for solution, have placed renewed emphasis on the importance of training our young men and women in history and political science — especially in the history, policy and institutions of the United States as a nation.

Masterful and helpful citizenship is not and can not be a matter of mere intuition and inheritance. International problems, national policy, state and municipal questions, cannot find successful and patriotic solution except by trained minds, both among the leaders and among the citizens at large. An increasing number of men are going from college halls into the legal profession, into state and municipal affairs, into legislative, consular and diplomatic service. The influence of the universities in the councils of the state, especially when crucial governmental questions are to be handled and settled, is constantly increasing. As the problems become more complex and the demand for their intelligent grasp and solution becomes more pressing, the universities must respond with increased resources, opportunities and energy for training in American history, international law, municipal institutions and general political science. Especially must the state universities make large provision for the profession of citizenship — a profession on which all others must depend for safety and progress. This demand is a reasonable one, and one which other universities, such as Columbia, Cornell, Wisconsin, and several more, have recognized in the establishment of Schools of History and Political Science. We are making towards the same general end, perhaps as rapidly as has been feasible to the present time; but still slowly. The establishment of the separate chair of American History and Political Science a year ago, making possible some advanced instruction in American history, has been followed by a rare piece of good fortune in obtaining from the national government an extremely valuable increase of official documentary material. The advanced courses in American History and Political Science have been taken by large numbers of students; and there is a constanly strengthening demand for still further courses; our students having found by comparison of our curriculum with those of other similar institutions that opportunities here are yet relatively deficient. There is no reason why we should lag behind. This University is at the very center of a great laboratory in political science — the complete machinery of state and municipal government is in every day operation here, while several important branches of national administration are represented in the city. It should be comparatively easy to build up here a great school of American History and Political Science, inferior to none in the country. Additional instructional force and large library resources will be needed, but they should be provided in response to a wise and reasonable demand. If Ohio is to retain her rank as the mother of statesmen and political leaders and the home of an intelligent and masterful citizenry, these demands must be met; and by no other institution so appropriately as by the State University.

THE LIBRARY.

That the heart of a University is its library is a fact now so clearly recognized by all who are keeping abreast of progress in educational methods that it may not be argued here. What needs to be considered is the question: What is the condition of this heart? Is its action healthy? Are the beats which send the life blood throughout the whole organism firm and regular?

For six years the library of this University has been recognized as one of the regular departments of the institution — and the Librarian has had a seat and a vote in the General Faculty. Within that period its growth has been steady, but somewhat slow. At the time of its removal to its present quarters in Orton Hall (1893) the library contained about 13,000 books. At the present time it contains nearly 31,000 books, an increase during the six years of 3,000 volumes per year. Within this period Harvard's library has been increasing at the rate of 15,000 volumes per year, Columbia 18,000, University of Pennsylvania 10,000. The fact that Harvard has added five times, Columbia six times and Pennsylvania three times as many books per year to their libraries as has this University, need not interest us especially; but the relation of the growth of their libraries to the growth of the institutions as a whole is significant. This is why the slow growth of our own library is almost ominous. Certainly it has not kept pace with the growth of the University as a whole, while it should have grown more rapidly. In a University with six colleges, and soon to have a seventh, the library is not as large as it should be for one college.

The additions to this library by purchase ought to be at least 5,000 volumes a year. This would require an annual appropriation of $12,500 for books alone.

In administration the library has always been greatly hampered. There has been a gradual development along this line, but the library has still an inadequate force. The one point which should be emphasized here is the difference between a university library and a public library. The fact that certain things are done and certain salaries paid in a public library has but slight bearing upon the conditions of a university library. Such a library is an integral part of an educational institution, its policy must be determined by the policy of the institution as a whole, and the salaries paid must be regulated with reference to the value of the services rendered from the university standpoint. The librarian of a university ought to rank in general culture, in special training and equipment, in definite purposes, in intensity of life — in all qualities and characteristics — as a full professor at the head of a department. The heads of library divisions should rank as assistant professors. Library assistants should rank as instructors. In all clerical work, thoroughly and peculiarly competent stenographers and typewriters should be employed.

A comparison instituted between what exists in our own library in this brief statement of what ought to be, will show very graphically the changes which ought to be accomplished at the earliest moment.

The equipment of the library has kept fair pace with its growth and activity, but the time has come when the problem of a library building must be faced. That a building for the library alone must soon be erected is evident to those who have kept in touch with all library conditions. However, it would be better to patiently endure crowding in our present quarters than to erect a building not entirely adapted to its purposes.

In designing a library building one of the first things to keep in mind is that it should be a building which can be enlarged. No matter what its first size, or how wisely it has been planned, the time will come when it will be necessary to add and change. In selecting a site this should be kept in mind. The ideal place on the University campus is at or near the center of the present oval — not far from where the path between Orton Hall and University Hall crosses that between Botanical Hall and Hayes Hall. It is almost the geographical center of the campus, which is exactly where a university library ought to be; and it would be a half-way stopping-place between all buildings. This is a great advantage.

The library building should be devoted entirely to the library, but the interests of a library are now so varied that the number and character of the rooms will be many. There should be at least three large reading rooms. One of these would be the general undergraduate reading room of the University. Around its wall should be shelved a library of the world's "best books." To the student, this will take the place of a private library; and will be a place to browse, a place to study and read. The second would be the general reference room in charge of the reference librarians; where would be kept all reference and reserved books, the bibliographies and the library catalogue. The third would be the special reference room, fitted with individual desks; where a certain number, and that a large number, could be given places for special study. In addition to these large rooms, there should be a number of seminary rooms, or suites — as they ought to be in sets of two or three. Then there must be a periodical room, a newspaper room, a fine art room; and provision should be made for other special needs. In addition to these public rooms are the rooms for administration. Because they have been mentioned last is no indication that they are of least importance. They should be unusually spacious, light and airy. The stack ought to be entirely outside of the main building, connected by a "neck," closed by fire proof doors.

To erect and equip such a building, after an approved pattern, would require at least $200,000. Townshend Hall is an excellent example of what such an investment would create. Of all university build-

ings, the one which would stand for the highest expression of thought is the library building. Nothing elaborate, nothing ornate, is wanted; but that satisfactory completeness and efficiency which comes from the most intelligent plans, worked out in the best material, by most competent architects.

I have long felt that such a building, on this campus overflowing with the best of the young life of the commonwealth, ought to be distinctly and evidently a memorial to the men of the Grand Army of the Republic; whose labors and self-sacrifices made life in this and in all our sister states really worth living.

CONCLUSION.

In conclusion I beg leave to express again my keen appreciation of the possibilities that await this institution. Situated at the very heart of this great commonwealth, with a fast hold upon the confidence of the state, and more and more competent to minister to all the interests of its citizens — it cannot fail of a glorious future. Given its true place as the logical head of the state system of free public education, with all its energies centered upon the highest forms of service, with its affairs administered without fear or favor of any kind, and with constant recognition of the fact that the institution and its work is of greater importance than the personal interests or immediate welfare of any individual connected with it, — in ten years the Ohio State University ought to stand in the very front of the Land-Grant colleges.

Respectfully,

JAMES H. CANFIELD,

Columbus, June 30th, 1898.

TABLE I — THE WORK OF INSTRUCTORS, 1898-99.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
AGRICULTURE.									
Breeds of Live Stock (8)†	3			2			31		
Principles of Breeding (9)		3			2			37	
Stock feeding and Hygiene (10)			3			2			23
Farm Equipment (11)	3			4			26		
Soils (12)		6			4			30	
Farm Crops (13)			3			2			23
Animal Mechanics and Exterior (14)	3			2			15		
Butter Making and Cheese Making (15)					8			18	
Rural Economics (16)			4						15
Dairy Farming (5)		2			2			16	
Butter Making and Cheese Making (6)					16			19	
Butter Mak'g and Cheese Mak'g (7, 15)		2			8			19	
Special								3	
AGRICULTURAL CHEMISTRY.									
Principles, Nomenclature, etc (1)	2			6			67		
Organic Chemistry (8)		2			6			57	
Applications of Chemistry to Agr. (9)			4			6			52
Laboratory (4)				10	10	10	23	21	10
Chemistry of Milk and Milk-testing (7)		2						15	
Laboratory (6)					10	10		2	2
ANATOMY AND PHYSIOLOGY.									
Human Anatomy and Physiol. (1, 51, 52)	6	6	6	9	3	3	87	82	74
General Physiology			3			1			6
Histology and Hist-Chemistry (59, 4)	2	2	1	18	10	10	8	10	10
Physiological Laborat'y (53, 54, 55, 56)	2	1	1	13	9	15	12	12	12
Bacteriology (6, 8, 61)		2			5			53	
Microscopy (5, 58)			1			3			14
Thesis and Similar Work				3	2	4	5	3	2
Chemical Physiology (3)			1			6			4
Special Bacteriology			1			2			6
ASTRONOMY.									
Astronomy and Geodesy (2)			4	12			7		9
General Astronomy (52)			5						6
Advanced Astronomy (55, 56)	2			10		10	3		1
Special						10			1
Meteorology (3)			2			1			35
Thesis and similar work						10			1

† The figures in brackets are the department numbers — for which see Part II of this Report.

TABLE I — THE WORK OF INSTRUCTORS, 1898-89 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Team	Third Term	First Term	Second Term	Third Term
BOTANY.									
Physiological Botany (66a)	6			14			39		
Medical Botnay (4)					4			11	
Medical Botany (56)					4			4	
Systematic and Physiol'gical Bot'y (55)	2			8			18		
Physiological Botany (53)	3			6			6		
Physiological and Economic Botany (7)		3			8			18	
Dendrology (9)				4			2		
Laboratory Work (57,58, 60, 64, 66)				12		29	8		16
Elementary Botany (1)			3			16			40
Economic Bot'y and Veg. Pathology (8)			3			6			12
Special and Advanced Work (59, 63, 65)				12			7		
CLAY WORKING AND CERAMICS.									
Ceramic Chemistry (8, 3)			2			15			8
Lectures (4)	5			5			10		
Analysis of Clays and Minerals (2)		1			10			5	
Lectures and Laboratory (6)			10			12			8
Analysis of Glasses and Glazes (1, 7)	2			25	10		6	4	
Manufacture of Bricks (5)		7						9	
Thesis and Similar Work				30	30	30	1	1	1
Lectures (16)			5						1
CHEMISTRY.									
Elementary (51, 52)	2	2		4	4		48	41	
Elementary (7)	5	7		34	40		145	139	
Qualitative Analysis (12)			2			12			16
Qualitative Analysis (53, 54)	1	1		6	3		10	6	
Quantitative Analysis (55, 56, 4)	1	1	1	9	4	8	25	21	17
Organic (57, 58, 8, 9)	5	1	1		4	3	6	6	3
Advanced Chemistry (60)					3			3	
Applied Chemistry (16)		2						3	
Toxicology (11)			4						12
Thesis and Similar Work	2			2			3		
Inorganic Preparations (17)				2			4		
Sanitary Anaylsis (15)			1			7			11
Theoretical Chemistry (14)		3						3	
CIVIL ENGINEERING.									
Land surveying (1)	5			8			20		
Topography (4)		1			15			16	
Railroad Surveying (2)			5			2			12
Topographical Surveying (3)	1			12			10		
Working Drawing in Ry. Cons't'n (5)		½			15			11	
Stereotomy (6)		3			15			12	
Bridge Strains (7)			5						9

TABLE I — THE WORK OF INSTRUCTORS, 1898–99 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
CIVIL ENGINEERING — Concluded.									
Bridge Designing (8)			2½	10			7		
Civil Engineering Laboratory (14)					8			16	
Sanitary Engineering (10)			5						7
Masonry Construction (15)	5						9		
Highways (16)		5						7	
Water Supply (18)		5						7	
Trusses (19)			½			5			12
Surveying (21)			2			2			4
Thesis and Similar Work				8	5	10	7	7	7
DOMESTIC SCIENCE.									
Domestic Economy (1, 2, 3)	2	2	1	12	12	12	21	19	17
Domestic Economy (4, 5, 6)	1	1	1	6	6	6	3	7	5
DRAWING.									
Freehand Drawing (1)				26	24	18	170	162	40
Lettering (2)			3			18			139
Mechanical Drawing (3)	2	2	2	6	8	4	62	56	48
Draughting and Blue Printing (4)		1			4			7	
Photography (7)	1		1	6		6	11		20
Mechanical Drawing (8)	1	1		2	2		5	4	
Mechanical Drawing (10)	1			6			42		
Mechanical Drawing (11)		1			8			5	
Clay Modeling (12)					4	4		4	2
Pen Drawing (14)				4			6		
Domestic Architecture (15)		1	1		2	2		4	4
Technical Drawing (5)	1			4			28		
Orders of Architecture (1)		1			8			1	
Styles of Architecture (2)			2			6			1
Decoration and Ornament (5)									
*ECONOMICS.									
Elements of Political Economy (51) (52)	8	8	. .	2	2		54	68	
Practical Problems in Economics (55)	2	.	. .				45		
Industrial and Social Reforms (56)	..	2	. .					49	
Transportation Problem (57)	2	.	. .				28		
Money and Banking (58)	..	2	. .					27	
Seminary (61) (62)	2	2	. .	2	2		5	4	

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
ELECTRICAL ENGINEERING.									
Electrical Engineering (2)	5	5	5				4	10	9
Electrical Designing (3)				6	6	6	11	10	9
Electrical Laboratory (4)				18	18	9	11	10	9
Electrical Engineering (6)	2	2					15	16	
Electrical Engineering (7)				8	12		15	15	
Special						6			2
*ELOCUTION AND ORATORY.									
The Science of Expression (51) (52)	4	4		1	2		73	65	
The Art of Expression (53, 54)	2	2		2	2		15	12	
*ENGLISH LITERATURE.									
Introduction to Eng. Literature (51) (52)	8	8					76	34	
The English Bible (55) (56)	1	1					11	10	
Shakespeare (57)	3						17		
Eng. Poetry from Spenser to iMlton (53)	2						11		
Prose from Cowper to Ruskin (63)	3						9		
Prose from Spenser to Milton (54)	2	2						24	
Masterpieces (65, 66, 67)	3	3					11	9	
Thesis Work					3			4	
Elizabethan Drama (58)		3						13	
Poetry from Cowper to Browning (64)		3						17	
*EDUCATION.									
Elementary Educat'l Psychology (51)	4						8		
Modern Educational Theories (52)		4						6	
History of Education (53)	4						8		
The Herbartian Pedagogy (55)	4						3		
The History of Education, U. S. (57, 60)	2	2					14	7	
Philosophy of Education (58)		4						14	
Plato's Republic (54)		2						5	
Educational Value		2						5	
Child Study	2				2		2	3	
Froebel (56)		2						4	
GEOLOGY.									
Elementary Geology (4)		5						10	
Cosmical Geology (2) (51)	5	5		2	1		36	33	
Paleontology (53) (54)				3	5	3	4	5	2
Petrography (55) (56)				3	5	3	4	3	1
Physical Geography (1)			5						37
Economic Geology (3)			5						22
Geographic Geology (58)		2				2		1	1
Special			3						3

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
GERMAN LANGUAGE AND LITERATURE.									
Elementary German (1) (51) (52)	12	12					128	114	
Science Reading (2) (53) (54)	2	2					16	20	
German Literature (4) (55) (56)	8	8					40	36	
The German Drama (57)	3						7		
The German Prose (58)		3						7	
Faust I—(59)	2						7		
Faust II—(60)		2						8	
Thesis					1			1	
Colloquial Exercises (65) (66)	2	2					5	4	
Old Norse (69)	2						4		
Sanskrit (51) (52)	1	1					2	1	
Comparative Grammar (70)		2						20	
*GREEK LANGUAGE AND LITERATURE.									
Elementary Greek	5	5					14	14	
Xenophon's Memorabilia (51)	4						17		
Odyssey (52)		4						14	
Lysias (53)	4						25		
Homer (54)		4						23	
Homer (57)	3						7		
Sophocles Antigone (58)		3						7	
Attic Drama (68)	2						9		
Sophocles (62)		2						8	
Graduate	1	1					1	1	
*HISTORY AND POLITICAL SCIENCE.									
HISTORY									
General History of Europe to Close of Middle Ages (51)	6						66		
From Close of Middle Ages to French Revolution (52)		6						67	
Political and Constitutional History of England to the Accession of the Stuarts (53)	3						26		
From Accession of Stuarts to Present Time (54)		3						19	
Political and Constitutional History of United States (55) (5) (56)	4	4					55	50	
History of Europe from 1789 to 1815 (57)	3						7		
History of Europe since 1815 (58)		3						3	
Roman History and Institutions (59)	2						7		
Protestant Reformation (60)		2						4	
Pro-Seminary (61) (62)	2	2					14	13	
Secession, Civil War and Reconstruction (65)	3						29		
American Diplomatic History (68)		3						33	

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
POLITICAL SCIENCE.									
Constitutional and International Law	4						32		
Municipal Government (52)		2						33	
Political Institutions of the United *States (53)	3						24		
Comparative Political Institutions of Europe and America (54)		3						24	
Thesis Work				4	3½		14	13	
HORTICULTURE.									
Elements of Horticulture (1)	3	3	3	2	2	4	20	8	12
Pomology and Viticulture (5)	2			4			3		
Vegetable Gardening and Seed Growing (6)		4			1			2	
Small Fruit Culture (7)			3			2			4
Elements of Floriculture (8)	1			2			3		
Commercial Floriculture (9)		1			2			1	
Home Flower Gardening (10)			1			2			1
Arboriculture (11)	1			2			3		
Forestry (12)		2						2	
Landscape Gardening (13)			1			2			1
Thesis and Similar Work				2	3	2	2	3	2
INDUSTRIAL ARTS AND SHOPWORK.									
INDUSTRIAL ARTS.									
Tools and Machines (1)	3	3	3				2	5	2
Machine Design						9			18
Workshop Appliances (5)			3						7
SHOPWORK.									
Carpentry and Pattern Making (1)				12	12	23	52	27	52
Forging (2)		1½		14	15	6	56	32	15
Foundry Work (3)					4			13	
Chipping and Filing (4)				6	4	15	17	27	22
Machine Work (5)				4	6	6	19	6	13
Advanced Machine Work (6)				8	6	9	14	8	5
*LATIN.									
Cicero, Livy (51)	8						50		
Plautus, Terence (52)		8						43	
Horace (53)	8						43		
Juvenal, Pliny (54)		8						39	

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*LATIN — Concluded									
Lucretius (57)	6						8		
Elegaic Poets (58)		6						7	
Pharmaceutical (1) (59) (60)	5	5					12	8	
Linguistics and Inscriptions (61) (62)	2	2					3	3	
Thesis and Similar Work									
Prose Composit'n and Tr'slat'n (63) (64)	2	2					4	4	
MATHEMATICS.									
Elementary Algebra (1)	10						22		
Elementary Algebra (2)	5	5	5				16	21	16
Plane Geometry (3) (3a)	5	10					21	36	
Solid Geometry (13)		5						24	
Plane Trigonomerty (14)	30		10				140		27
Analytical & Spherical Trigonom't'y (15)		14						125	
College Algebra (16)		21						134	
Plane Analytics (17)			35						126
Space Analytics (18)	15						56		
Differential Calculus (19)		15						49	
Integral Calculus (20)			15						48
Differential Equations (11)	2						24		
Least Squares (8)	2						10		
*MATHEMATICS.									
College Algebra (67	15						93		
Problems on all Past Work (66)		1						6	
Advanced Mathematics (63) (64)	7	9					12	12	
Trigonometry (68)		1		12				61	
History of Mathematics			2						7
MECHANICAL ENGINEERING.									
Mechanism (3)		5				4		18	10
Analytical Mechanics (6)	10	13					33	37	
Strength of Materials (7)			10						34
Thermodynamics (8)	5						18		
Prime Movers (9)	5						19		
Machinery and Millwork (10)		5						15	
Experimental Laboratory (12, 13, 14, 15, 16, 17)		1	1	12	13	14	20	13	15
Machine Design (18)	5	5					6	7	
Hydraulic Machinery (20)			2						9
Timber and Masonry (22)		5						10	
Experimental Eng'ring Laboratory (24)						6			7
Experimental Eng'ring Laboratory (25)						6			7

* Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
MECHANICAL ENGINEERING.—Con.									
Graduate Work	1	2		18	18	20	3	3	3
Care of Boiler and Engine		2						21	
Theses					6	20		8	7
METALLURGY AND MINERALOGY.									
Metallurgy (4)	5	5					21	15	
Metallurgical Laboratory (5)		1	1	10	20	10	10	13	12
Ore Dressing (8)	2						4		
Assaying (6)					14			7	
Mineral Chemistry (9)			5						3
Mineralogy (2)			3						60
Determinative Mineralogy (3)						10			4
Thesis and Similar Work						3			4
Metallurgical Construction (7)		3			2			4	
MILITARY SCIENCE AND TACTICS.									
Military Drill							343	327	247
Tactics		2						40	
MINE ENGINEERING.									
Mine Surveying (1)	5			6			3		
Ventilation and Haulage (2)		5			2			4	
Mine Engineering (5)	5	5	5	2	2		3	3	3
Mine Operating (3)			5			2			3
Mine Surveying (4)	3			9			7		
Mine Engineering (6)			1			8			3
Thesis and Similar Work					5				
PHARMACY.									
Pharmacy (6) (7)	3	2			10		12	12	
Dispensatories (8)			2			10			8
Pharmaceutical Chemistry (9)	2			10			18		
Extemporaneous Chemistry (10)		2			10			18	
Lectures and Dispensing Practice (11)			2			10			15
Materia Medica (12) (13)	3	3					14	21	
Materia Medica and Therapeutics (14)			3						19
Pharmaceutical Assaying (15)	2			10			5		
Methods of Manufacture (16) (17) (18)		2	7		10	20		5	10
Pharmacy (12) (13) (Vet. Students)	5	5				5	5	5	5

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*PHILOSOPHY.									
Psychology (51)	4						40		
Psychology (53)	6						36		
Logic and Ethics (52)		4						32	
Logic (54)		3						35	
History of Modern Philosophy (56)		9						37	
Hist. of Ancient and Medieval Phil. (57)	3						9		
Advanced Work (59) (60)	2	2					3	2	
Physiology & Exp. Psychology (61) (62)	3				4		4	4	
Study of Religion (63) (64)	2	2					4	2	
Special									
Ethics (55)	6						31		
PHYSICAL EDUCATION.									
Young men	5	4	4	38	32	24	150	100	30
Young women		16	16	16	2		100	90	75
PHYSICS.									
Elementary Physics (1)	10	10					89	79	
Mechanics and Heat (2) (51) (52)	7	6	6				88	62	62
Problems (3)	2	2	2				27	20	16
Electricity and Magnetism (4)	3						14		
Physical Laboratory				30	19	19	13	43	35
Mechanics, Sound and Heat (53)	3						28		
Electricity and Magnetism (54)		1			4			20	
Thesis and Similar Work				9	6	6	2	3	3
*RHETORIC AND ENGLISH LANGUAGE.									
Paragraph Writing (51) (1)	14			11			309		
Practical Rhetoric (1) (52)		14						287	
Analysis of Prose (53) (54)	8	8					40	72	
Advanced Rhetoric (3) (64)	4	4					57	44	
Rapid Writing (55) (56)	1	1		4	4		25	19	
Brief Making and Argument (57)	3						20		
Short Stories (60)		2						11	
Poetics (59)	2						8		
Studies in Exposition (58)		3						14	
Rhetorical Theory & Criticism (61) (62)	2	2			10		5	6	
Thesis and Similar Work					2				
ENGLISH LANGUAGE.									
Old English (51) (52)	2	2					26	24	
Middle English (53)	2						9		
Historical English Grammar (54)		2			2			6	

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
*ROMANCE LANGUAGES.									
FRENCH									
Elementary French (1) (52)	12						154		
Modern Prose and Plays (1) (52)		12						131	
Modern French Literature (55) (56) (2)	8	8					63	47	
Recent French Prose Writers (58)		3						29	
Advanced Prose Composition (59) (60)	1	1					18	16	
French Comedy (57)	3						27		
French Seminary (61) (62)	3	3					6	8	
Thesis and Similar Work				5	5				
ITALIAN.									
Elementary Italian (51) (52)	2	2					8	5	
SPANISH									
Grammar and Readings (51) (52)	2	2					12	11	
VETERINARY MEDICINE.									
Anatomy (28)	5						15		
General Pathology (29)		5						18	
Special Pathology (30)			5						16
General Surgery (24)	5			5			2		
Clinic (19)	2	2		12	12	12	9	9	9
Special Pathology (20) (21)	3	3					5	4	
General Therapeutics (22)			5						4
Lectures and General Pathology (14)	5		5				7		5
Osteology (11)	5			10			7		
Meat Inspection (27)	5						6		
Special Pathology (15) (16)		5	5					5	5
Diseases of the Cow (17)		3						15	
Surgical Diseases and Operations (18)	5	5	5				5	5	5
Myology (12)		5						5	
Eye Diseases		2						3	
Principles of Horse-shoeing (26)			5						3
Obstetrics (23)		5	5					2	2
Canine Disease (31)			3						3

*Semester work

TABLE I — THE WORK OF INSTRUCTORS, 1898-99 — Concluded.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
ZOOLOGY.									
Comparative Zoology (1) (51) (52)	4	4	4	10	8	8	81	64	21
Com. Anatomy of Vertebrates (53) (55)	2			12			4		
Com. Anatomy of Vertebrates (54) (56)		1			8			3	
Zoology and Anatomy (58) (60)		2			8			3	
Economic Entomology (3)						6			2
Economic Entomology (4)	2	2	2				15	15	12
Systematic and Practical Entomology (7)			3						7
Comparative Zoology (64)		2			4			21	
Zoology (57)				12			3		
Graduate Work				16			2		

TABLE II—SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY.

	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Bachelor of arts	1	1	6	2	2	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18	8
Bachelor of philosophy	..	..	..	2	..	2	2	1	1	2	6	7	4	8	8	5	5	19	26	27	27	31
Bachelor of science	5	5	1	2	5	3	2	4	2	4	4	8	2	10	7	11	7	9	4	10	10	2
Bachelor of science in agr.	..	..	..	..	..	..	..	1	1	..	..	..	2	3	3	..	..	2	4	4	5	5
Bachelor of science in chemistry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Bachelor of science in H., F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	1	2	1
Bachelor of science, Ind. Arts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..
Civil engineer	..	..	..	..	..	1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8	7
Mechanical engineer	..	..	1	..	2	4	1	3	1	2	4	2	3	2	5	2	1	2	4	9	5	6
Electrical engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	9	8	15	17	13	10	7
Engineer of mines	..	..	1	1	..	..	1	2	4	1	4	2	..	..	1	1	4	1	6	3	2	3
Graduate in pharmacy	..	..	..	..	..	..	..	..	..	3	..	2	3	6	5	5	3	11	12	11	7	..
Master of pharmacy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
Doctor of veterinary medicine	..	..	..	..	..	..	..	..	..	1	..	1	4	..	4	5	..	4	2	3	..	..
Master of arts	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	..	2	..	4	4	3
Master of science	..	..	..	1	..	..	..	..	..	..	..	1	1	2	2	..	2	..	3	3	2	3
Master of agriculture	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	1	..
Master of science in H. & F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1
Doctor of philosophy	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Doctor of science	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..
Bachelor of laws	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	18	15	16	6	23	22	21
Master of laws	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	2	..	6	..	..	..
Totals	6	7	9	8	9	11	12	16	18	24	28	26	30	36	65	79	70	112	118	135	126	99

TABLE III—SHOWING THE NUMBER OF STUDENTS IN THE GENERAL TECHNICAL AND PROFESSIONAL COURSES.

	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.	1895–96.	1896–97.	1897–98.	1898–99.
General courses (College of Arts).	137	151	194	245	256	322	327	358	371
Technical courses (other Colleges except Law)	166	259	381	368	424	453	453	511	541
Professional courses (College of Law)		55	67	72	65	100	132	148	191
*Graduate students and summer school	2			1		94	97	133	75
Totals	305	465	642	686	745	969	1,019	1,150	1,178

*Until 1896, graduate students have been included in the first three classes.

REPORT OF THE LIBRARIAN

COLUMBUS, OHIO, *July 1, 1899.*

The President, Ohio State University:

Dear Sir:—The annual report upon the condition of the University Library is herewith respectfully submitted.

SIZE AND GROWTH.

The number of books in the library is approximately 31,000. The number is not given exactly because the great number of public documents which have been received within the last few months have not yet been accessioned, lack of room and lack of help having made it impossible to keep that work up to date.

Thirty-one thousand volumes would be considered but a medium-sized library for a college, and for a university with six colleges it is totally inadequate. In the Phi Beta Kappa address at the Northwestern University in 1893, William F. Poole well expressed the true relation of the library to the university. He said, "The popularity of a university once depended wholly upon the professional reputation of its instructors. Now the leading questions relate to the size, character, and value of its library. The presence of a large body of post-graduate students is an inspiring feature of university life, and to the public a guaranty of the high scholarship and superior educational advantages of the institution. These students can not be secured and retained unless they have access to a large and well-furnished library." Now in character the University Library yields to none. Our books are well selected, there being very little "lumber" on the shelves. But when size is considered, it is plainly evident that large and frequent additions will have to be made before the Ohio State University Library can be that power in the University that all, who are keeping abreast of progress in educational methods, now recognize that it ought to be.

It is six years since the library was made a regular department of the University. Within that time the additions have been (in round numbers) 18,000 volumes, an average increase of 3,000 volumes per year. Within this period Harvard's Library has increased at the rate of 15,000 volumes per year, Columbia 18,000, and the University of Pennsylvania 10,000. The fact that Harvard has added five times, Columbia six times and Pennsylavnia three times as many books per year to

their libraries as has the Ohio State University need not interest us especially, but the ratio of the growth of their libraries to the growth of the institutions as a whole is significant. And here is the reason that the slow growth of the university library is ominous. It has not kept pace with the growth of the University as a whole, while it should have grown more rapidly.

Naturally the main source of growth must be looked for in the annual appropriations of the Board of Trustees. Since the average cost of a University book is $2.50 it is easy to estimate the appropriation needed to add by purchase the very moderate number of 5,000 volumes per year. The largest annual appropriation for books which has yet been received is $5,000, it being the appropriation for 1898-1899, and the same amount has been appropriated for 1899-1900. It is earnestly hoped that the Trustees will soon see their way clear to more than double the size of the annual appropriation.

One very important source of increase is to be found in public documents of all kinds, — government, state and municipal, — and in the reports and transactions of learned societies. The majority of these most valuable documents may be had for the cost of transportation, providing there is some one connected with the library whose duty it is to keep constantly informed as to what is being issued and to make a point of securing it. A very great service was done to the Library by the Board of Trustees when an assistant was added to the Library staff, who should be responsible for securing material of this kind.

Another source of increase, and one which has been especially fruitful during the last year, is found in the donations resulting from the individual care and interest of friends of the University. The number of books added to the Library in 1898-1899 was 7,660, an annual increase unprecedented in the history of the Library, and almost half of the entire number added since 1893. Of this number 5,000, approximately, have been presented, and fully 3,000 of these gifts came through the action of three men. Such a gift deserves special mention and we take pleasure in giving its history.

The University Library is not a depository for United States documents. In designating such depositories the University has been passed by and now Ohio has her full quota. Many of the cloth-bound volumes have come to the Library, but the set of sheep-bound documents, which contains many valuable committee reports not to be obtained in any other way, has never been on our shelves. In March Professor Knight addressed a letter to Secretary Cope, calling his attention to the great loss the Library was sustaining in not possessing these books and suggesting that something might be accomplished through President McKinley. Secretary Cope at once wrote a strong letter to the President, stating that the State University was not obtaining from the government the gifts to which it ought to be entitled,

and asking that if possible something be done to change the existing condition of affairs. President McKinley, who still retains a warm interest in the University, gave the matter his immediate attention, with the result that about half of the sheep-bound documents have been sent to us from Washington, and we are expecting to obtain more. So much is due to individual effort. Under the existing law we can not be made a depository. It is hoped that the plan first suggested by the Association of Agricultural Colleges of making depositories of all the land-grant colleges which are not already such, will be carried through this next session of Congress.

Many gifts have come to the Library through the efforts of the University Library Association. This is an organization the object of which is "to work for the welfare of the Ohio State University by augmenting the University Library," and from it the Library expects to derive much benefit. Mr. Paul Jones, wisely feeling that the Library was the point on which outside effort for the advancement of the University could best be centered, was the originator of the organization and is its president. The Association is composed of those specially interested in the University and naturally contains many alumni. At the business meeting of the Alumni Association, held June 13, it was voted to appropriate $25 from the funds of that Association to be used by the University Library Association under the direction of the librarian. This is not for the purchase of books, but is to be used for incidental expenses, such as circulars and letters, which it is hoped will bring large results in additions to the library. During the last year 395 books have been added to the Library through the efforts of the Association. Some of these have been rare old volumes, a number presented by Mr. Hylas Sabine having come from the library of Daniel Webster and containing his autograph. Special mention should be made of the books presented by Mr. George T. Spahr from his father's library in response to the request of Mr. Jones, acting for the Association. These number 263, and being along a line in which the University Library is weak, will be of special value.

An alphabetical list of donors to the Library during the past year is appended to this report.

USE.

The use of the Library is constantly increasing. It is now open fourteen hours each University day and eight hours on Saturday. It has not been thought wise to use much of the assistants' time in gathering statistics, but for two months this year a record was kept of the number coming to the Library each day. The average attendance was found to be 350 per day. There are months when the attendance is not so large. During fine weather the tendency to spend much of the time out of doors reduces the number in the reading room, yet

the attendance even during the month of May was by no means small. The use of the Library at night, though not large, is constant and satisfactory. The summer use of the Library has been exceedingly small. Even when the summer school has been in session an attendance of more than one or two people a day has been a matter worthy of comment. Yet it is desirable that the Library be open a part of the time during the summer, and it has been decided to have it open for consultation each day during this summer, from eight until eleven A. M. During the meeting of the American Association for the Advancement of Science the Library will be open all day.

NEED OF NEW BUILDING.

The equipment of the Library has kept fair pace with its growth and activity, but the time has come when the problem of a library building must be faced. That a building for the Library alone must soon be erected is evident to those who have kept in touch with the Library conditions. However, it will be better to patiently endure crowding in our present quarters than to erect a building not suited to its purpose in scope or size.

In designing a library building, one of the first things to keep in mind is that it must be a building which can be enlarged. No matter how large the building or how wisely it has been planned, the time will come when it will be necessary to add to it. In selecting a site, this should be remembered. There is a place on the University campus which, if a good foundation can be obtained, is almost ideal, and that is the site of the Botanical Building. It is almost the geographical center of the campus, which is the place for a college library to be, and what is better still, it is on a hillside which makes it possible to have the main floor of the building connect with the center of the stack, which is a great advantage. If a new building should be erected for the Department of Botany, it would be most desirable to reserve this site for the Library.

It is probable that it would not be necessary to build the stack at the time of the erection of the building. That could come later. The building in itself should be so spacious that for a number of years the whole Library could be contained in it. Then, as the Library grows larger and need for reading room as well as book room increases, the stack could be added and by the removal of the books additional space could be given to readers. The building should be devoted entirely to the Library, but the interests of a Library are now so varied that the number and character of the rooms will be many. There should be at least three large reading rooms. One of these would be the general undergraduate reading room of the University. Around its walls should be shelved a Library of the world's "best books." This will be

to the student in place of the private library, a place in which to become familiar with the "literature of power." The second would be the general reference room in charge of the reference librarians, where would be kept all reference and reserved books, the bibliographies and library catalogues. The third would be the special reference room fitted with individual desks where a certain number, and that a large number, could be given a place for special study. There should also be a large hall where lectures could be given. In addition to these four rooms there should be seminary rooms, a periodical room, a newspaper room, a fine art room and provision for other special needs. There must also be the rooms for administration. Because these have been mentioned last is not an indication that they are least in importance. That they be spacious, light and airy is of the utmost importance.

To erect such a building after the manner in which it should be erected would require at least $300,000. A perfectly plain building containing the requisite number of rooms could probably be built for less money, but of all University buildings the one which stands for the highest expression of thought in brick and stone should be the Library building. Nothing elaborate, nothing ornate is wanted — only the elegance which comes from the work of the best architects and artists, and the use of the best materials. And simple elegance is not low priced.

ADMINISTRATION.

There is a great difference between the ideal college library and the public library. This is admitted by all who have studies the problems confronting the two institutions. The public library exists for the whole community, it must address itself to all classes of men, it must attract the children and retain the mature reader. The college library exists primarily for the few, and those few with a common interest. Though other readers are welcome, it is the need of the professor and student that must first be considered. The Library must be looked upon not as a great social force, but as a factor in the educational work of the college. This is the fundamental characteristic of the college library. It must be an active force in the educational policy of the school with which it is connected. To that end its first and most important duty is to secure books, more books and always more books. A professor knows the literature of his subject. If he does not he should not be at the head of his department. What he needs for himself and for his students is to have as much as possible of this literature on the shelves of the University Library. In a public library, full cataloguing (a very expensive process) must keep step with the book supply, or the public will have no way of knowing what the library possesses. In a college the professor knows what he ought to have,

knows what he does have, guides the students to it and can well do away with expensive cataloguing until there is plenty of money to put into such a luxury. What he needs, what the student needs, is to have the books.

In the University Library three of the five members of the library staff spend most of their time in the acquisition department. Miss Kellicott has charge of all orders, making a complete bibliographical study of each order as it goes out, checking the bills when the books are received, keeping all accounts — of which there are a goodly number — collating, stamping and accessioning all books, whether purchased or presented. Mr. Guittard is responsible for securing all documents which can be had for the asking. Reference has been made to this work in another part of the report. As has been said before, this work is invaluable. Miss Townshend has charge of the periodicals and binding. Watchful care must be given to periodicals in order to secure the reception of complete files; constant attention is requisite not only in looking after new binding, but also in keeping old volumes in good condition. If the Library binding could be done in the Library, it would be a very great advantage. A large and increasing amount of the most valuable material in a library comes to it of a necessity unbound. The library must see that this is well bound in order to preserve it, and the preparation of volumes for binding is no small item of the library work. All of the university binding has up to this time been done in Columbus, with varying degrees of satisfaction. We have been fortunate within the last few years in having the work uniformly well done, although we have suffered from the hurry incident to any business where there is a great pressure of work. One great difficulty, however, has been in the fact that the volumes have had to leave the library during binding. It has not been wise to allow all the binding to accumulate until the summer because of the danger of loss and damage arising from using unbound material, yet whenever binding has been sent from the Library during the year it has invariably happened that some books have been especially needed while they were away. Could this work be done in the library building, the books would be accessible during the whole period of binding excepting while in the press. This would be an advantage so great that it would seem sufficient reason for establishing a bindery, yet there are other reasons for so doing which are fully as important. Not least among them is the fact that our books could be kept in a better state of preservation. Scarcely a day passes without the necessity of books being mended. Much of this work now is done in the library, yet there are often breaks which can not be mended with the tools at our disposal. These books then have to be laid to one side until a lot is sent down to the bindery. With an expert binder in the building, work of this character could be kept

constantly up to date and would greatly save our books. Another point is that the binding would always be under the personal supervision of the librarian.

The books once secured, the next duty of the University Library is to teach the student to make the best use of them. Here the Library steps in as the ally of each professor. The professor gives the necessary references, but it is the Library which should lead the student to original research. Here is another point of difference between the public library and the university library. In the reference work of a public library the aim is to bring a person as much material as possible on his subject; in a college library it is the rule that, if possible, in no case is the material to be brought to a student, but care is always to be taken in helping him to secure it for himself. In a public library the main point is for an inquirer to know what *that* library contains on his subject, in a university library the student should be introduced to bibliographies which will let him know the best that has been written on the subject. He can then find out what his own library contains, and after reading that little does not go away feeling that he has read all that there is to know. In all reference work in a university library this educational feature must be prominent. Of course it requires time, but it is work that pays. In this the Library is weak, having only one regular assistant in the work, Miss Allen. Miss Jeffrey gives part of her time to it, but the most of her time is given to shelf listing and classification.

Classification is something which is made much of, but which in reality is nothing more than the orderly arrangement of the books on the shelves. What arrangement shall be adopted should depend upon the character of the library. The books in the University Library are carefully classified, but as yet no marks have been placed upon them. It is the intention this next year to follow somewhat closely the Harvard scheme of marking. The actual work of classifying, however, requires high scholarship and good judgment. Indeed, the reference work, the classifying, and the subject cataloguing should be in the hands of specialists. The idea that one person can so well know the whole range of knowledge as to do such work for a whole library in the manner in which it ought to be done, is manifestly absurd.

Reference has been made to cataloguing as a luxury. This refers to full dictionary cataloguing. An author list of everything in any library is, of course, a necessity, and this the University Library has. A classed subject catalogue is very desirable, and there is one in process of construction. Much can be done next year toward completing it without additional help. But a dictionary catalogue of subjects and authors is after all the only true catalogue, and that the library has never possessed, and can never possess (unless other work is given up), until a catalogue expert is added to the Library staff. Some librar-

ians, and they are of the highest rank, maintain that students in a university should be taught to use bibliographies, most of which are prepared by specialists, instead of depending upon any one catalogue, however good; and they say that money spent by colleges in such elaborate catalogues could better be spent in books. However, there is no disputing the fact that an entirely new catalogue of the University Library, made on the most approved plans, is very desirable, and the time when the Board of Trustees can see its way clear to appoint a cataloguer will be a very auspicious day for the Library and for the University.

Much of the time of the Librarian has necessarily been spent in routine work. This has been a great detriment to the highest work of the Library. Organization, superintendence and teaching should fully occupy the time of a university librarian. The organization of the acquisition department has been accomplished, but there is still much to do in the second division of the work, i. e., making the books of the most value to the student. Superintendence is, of course, constant. Teaching has two branches, first teaching the use of books to university students; and second, teaching library economy to special students. The first branch has been barely attempted and should receive special attention during the next year. Attendance upon lectures on books and the proper use thereof should be required of every student who enters the University. The second branch is fairly well established and it is hoped will lead to a regular course in library economy.

COURSE IN BIBLIOGRAPHY AND LIBRARY ECONOMY.

In 1888 there was established the first school in which library science was taught as a profession. This was at Columbia University, and the school, which was afterwards removed to Albany in connection with the New York State Library and is now known as the New York State Library School, became the parent of a number of other schools taught by its graduates and modeled on its plans. One of these is in connection with the University of Illinois. In no college or university, however, has library science yet been taught as one of the regular courses of instruction running through the entire four years of undergraduate work and with post-graduate courses. That this must be done soon is evident, and it is earnestly hoped that the Ohio State University may have the honor of being the first to offer such a course, giving credit therefor.

For two years students have entered the University for the sole purpose of studying in the Library, although it was known that they could receive no credit for such work. Next year there will be a class of four or five studying library work.

STAFF.

Not until June, 1893, was the Library recognized as a distinct separate force in the University. Up to that time it was attached to the regular work of a professor and necessarily was a secondary consideration with him. It was fortunate for the Library, however, that it fell into the hands of such men as Professor S. C. Derby and Professor J. R. Smith. Book lovers themselves, and with clear ideas of the whole range of literature, they established the book collection on a firm basis and did much to give that high character to the University Library and did much to give that high character to the University Library of which we are justly proud. But librarianship is a profession in itself and to ask one man to be both librarian and professor of a subject other than bibliography was found to be laying too heavy a burden on him. Accordingly, at the time of the removal to new quarters in Orton Hall, the Library was made a distinct department in charge of a librarian who was a member of the general faculty. This was an advance, though in reality it did no more than place the Library in an independent position at the foot of the ladder. The progress up the ladder was slow. The first round was reached when the librarian was granted enough money for student assistance to enable him to have some one beside himself in the library each hour of the day. From this point the Library has slowly advanced to where, with a staff of five and a small sum for employing student assistants, we may be said to occupy a middle place so far as service is concerned. Those who have followed carefully the work of the Library know well how much had to be left undone during the years of insufficient assistance. The Library is only now beginning to catch up with this back work. It is hoped that by next Christmas most of it will have been brought up to date, and this obstacle to progress will have been removed.

As has been said, the Library has scarcely yet reached the point where it can be said that in regard to service it is doing as much as it ought to do. In the first place, more trained helpers are needed. At the present time there should be in the Library an expert cataloguer and an additional reference assistant. Secondly, it should be possible to so arrange the work by departments that the head of a department could make use of clerks and copyists, thus concentrating his time in the truly scholarly work of the Library. Thirdly, there is needed a great advance in salaries. The one point which must be emphasized here is the difference between a university and a public library. The fact that certain things are done and certain salaries paid in a public library has no bearing at all upon a college library. A college library is an integral part of an educational institution, its policy must be determined by the policy of the institution as a whole and the salaries paid must be regulated solely with reference to the salaries generally paid in the college or

university. The librarian of a university ranks as one of the professors and should be paid accordingly. The heads of library departments should rank as assistant professors with corresponding salaries. Library assistants should rank as instructors and be paid according to the university scale for paying instructors. Clerical work should bring the same salary that is paid for such work in any business. A comparison of what exists in our Library with this brief statement of what should be, shows clearly the very inadequate manner in which the Ohio State University provides for its Library.

GOVERNMENT.

The Library ranks simply as one of the departments of the University, but in its work and requirements it is very much broader than would be indicated by such rank. It affects the work of every department of the University, and is essentially a part of each of the six colleges. This fact is virtually recognized by the Board of Trustees in the creation of the Library Council which, aside from the president of the University and the University librarian, who are members *ex officiis*, is composed of the Deans of the six colleges. This council stands to the Library in much the same relation that a college faculty stands to its college It is the governing body which settles all questions of library policy, directs the disbursement of the book fund and approves bills.

The council makes annually a written report upon the condition of the Library to the general faculty.

Very respectfully,

OLIVE JONES.

LIST OF DONORS 1898–1899.

	VOLUMES
American Bankers' Association	1
American Book Company	6
American Guernsey Cattle Club	1
American Hereford Record Association	2
American History and Political Sc. Dept. of O. S. U.	25
American Institute of Mining Engineers	2
American Shetland Club	2
American Short-horn Association	1
American Shopshire Association	4
American Society of Mechanical Engineers	1
Arkansas, State Documents	11
Arlington Mills	1
Babcock and Wilcox Co.	1
Black Top Spanish Merino Sheep Association	1
Boston Transit Committee	4
Brockhaus, F. A.	17
Brown, James S.	1
California, State Documents	34
Canada, Documents	2
Canfield, James H.	40
Cincinnati Chamber of Commerce	1
Colorado, State Documents	10
Connecticut, State Documents	107
Crane Company	1
Denison University	1
Denney, J. V.	1
Dorset Horn Sheep Breeders Association	1
Electric Appliance Company	1
Farm Implement News Company	1
Foulk, Charles W.	1
Fowler, Charles E.	1
Georgia, State Documents	16
Gordy, J. P.	1
Harris, William T.	2
Harvard University	1
Hensel, Otto	1
Herald Publishing Company	4
Herrick, B. B.	29
Herrick, L. C.	1
Heywood, W. S. and A. B.	2
Houghton, H. O.	1
Houghton, Mifflin and Co.	1
Hunt, T. F.	2
Illinois, State Documents	84
Indiana, State Documents	39
Iowa, State Documents	69
Kansas, State Documents	57

	VOLUMES
Kentucky, State Documents	23
Kershaw, Ella	30
Knight, G. W	4
McCall, John A	1
McCallum, Ray	1
Mack, I. F	1
Maine, State Documents	59
Maine State Pure Blood Jersey Cattle Association	8
Maryland, State Documents	14
Maryland College	1
Massachusetts, State Documents	157
Michigan, State Documents	139
Michigan, State Law Reports through G. W. Knight	71
Millar, John	1
Minnesota, State Documents	28
Missouri, State Documents	64
Monetary Commission	1
Montana, State Documents	1
Moore, Clarence B	2
Murrill, Paul I	1
National Educational Association	1
National Funeral Directors' Association	1
Nebraska, State Documents	22
Nelson, Baker and Co	1
New Hampshire, State Documents	18
New Jersey, State Documents	4
New South Wales Government	1
New York, State Documents	8
New York City	1
Noa, Frederic M	1
North American Galloway Association	9
Ohio, State Documents	179
Ohio State Archæological and Historical Society	3
Ohio State Law Library	5
Ohio State University Alumni Asso. through J. A. Bownocker	1
Ohio Wesleyan University	1
Ontario, Government	2
Orton, Dr. Edward	1
Philadelphia	1
Physiology, Dept. of O. S. U	2
Pittsburgh Reduction Company	1
Princeton University	1
Reform Club	1
Royal Society of Canada	1
St. Louis	1
Siebert, William	2
Smith, J. McClain	14
Sociology, Dept. of O. S. U	1
Southern Railway Company	1
Squibb, Edwin R. and Co	4
Standard Poland China Record Association	5
Sturtevant, B. F. Co	1
Text-book Association of Philadelphia	1

	VOLUMES
Townshend, Mrs. N. S.	13
Union Club	1
United States Government	3109
University Library Association—	
O'Kane, Henry	1
Randall, E. O.	55
Sabine, Hylas	23
Siebert, Wilbur H.	1
Shoemaker, A. L.	13
Spahr, George B.	263
Wharton, Mrs. Mary	39
University of Tennessee	1
Wisconsin Sheep Breeders' and Wool Growers' Association	2
Total	**5,017**

REPORT OF THE TREASURER

COLUMBUS, OHIO, June 30, 1899.

To the HONORABLE J. MCLAIN SMITH, President Board of Trustees of the Ohio State University.

SIR: I beg to hand you herewith my annual report for the fiscal year ending the 30th day of June, 1899. This report is accompanied by proper vouchers for all disbursements.

Respectfully,

F. W. PRENTISS, *Treasurer.*

STATEMENT I.

DETAILED STATEMENT OF RECEIPTS BY F. W. PRENTISS, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1899.

Date.	From whom received.	For what purpose.	Amount.	Total.
1898.				
July 18	W. C. McCracken.....	Sale of old iron.....	$2 50	
	Edw. Orton, Jr.....	Supplies in Dept Cer..	115 83	
	U. S. Treasury.....	App. Act Aug. 30,1890	24,000 00	$24,118 33
Aug. 6	G. B. Kauffman.....	Sale store-room sup...		224 00
12	Com. Sinking Fund...	Int. on Endowment...		3,800 00
Sept. 9	C. C. Middleswart.....	Diploma fee	5 00	
	F. C. Clark.....	"Bus. Men's Fund" Dep. Econ. and Soc.	230 00	235 00
16	Com. Sinking Fund...	Int. on Endowment...		2,500 00
22	Auditor of State.....	Req. No. 12 O. S. U. Fund	13,741 50	
	Alexis Cope, Bursar...	Students' fees	10,751 04	24,492 54
23	G. B. Kauffman.....	200 store-room cards.	1,000 00	
	Natl. Brick Mfg. Assn.	Scholarship Dep. Cer.	250 00	1,250 00
Oct. 13	F. C. Clark.....	"Bus. Men's Fund" Dept. Econ.....	70 00	
	Emerson McMillin	Endow. Fellow in Astron	300 00	
	L. T. Williams.....	Back rent Chap. House	75 00	445 00
28	G. B. Kauffman.....	Sale store-room cards	250 00	
	Alexis Cope, Bursar...	Students' fees	877 72	1,127 72
Nov. 2	Auditor of State.....	Req. No. 13 O. S. U. Fund	14,019 75	
	Auditor of State.....	Req. No. 14 O. S. U. Fund	34,075 00	48,094 75
12	G. B. Kauffman.....	1st and 2nd inst. rent, 1898-9		90 00
29	B. F. Thomas.....	1st and 2nd inst. rent, 1898-9	85 00	
	Alexis Cope, Bursar...	Students' fees	158 75	243 75
30	Com. Sinking Fund...	Int. on Endowment ..		7,400 00
Dec. 8	Auditor of State.....	Req. No. 15 O. S. U. Fund	14,009 36	
	Auditor of State.....	Req. No. 16 O. S. U. Fund	5,700 00	
	C. W. Mesloh.....	9th and 10th inst. rent, 1897-8	36 00	19,745 36
26	Com. Sinking Fund...	Int on Endowment...	2,814 99	
	Alexis Cope, Bursar...	Students' fees	135 44	
	W. Worcester.....	Broken glass Dorm...	50	2,950 93
30	W. H. Anderson & Co.	309 vol. Law Reports.		309 00
1899.				
Jan. 13	Emp. Lia. Ins. Corp...	Ins. overpaid	5 77	
	F. C. Clark.....	"Bus. Men's" Fund...	50 00	
	B. F. Thomas.....	3rd and 4th inst. rent, 1898-9	85 00	
	G. B. Kauffman.....	Store-room cards	250 00	
	G. B. Kauffman.....	3rd and 4th inst. rent, 1898-9	90 00	
	Alexis Cope, Bursar...	Students' fees	4,138 80	4,619 57
27	Com. Sinking Fund...	Int. on Endowment ...	2,750 00	
	Auditor of State.....	Req. No. 17 O. S. U. Fund	14,366 52	17,116 52

STATEMENT I — Continued.

Date.	From whom received.	For what purpose.	Amount.	Total.
1899.				
Feb. 20	Com. Sinking Fund...	Int. on Endowment ..		2,000 00
	Telfair & Telfair.....	Deeds to J. C. Shannon, J. Haley, J. P. Fisher, Act. March 14,1889	6 00	
	B. F. Thomas.....	5th inst. rent, 1898-9..	42 50	
	C. W. Mesloh.....	11th and 12th inst rent, 1897-8	36 00	
	Telfair & Telfair.....	Deed, S. E. Hawes, Act March 14, 1889.	2 00	
	F. M. Moore.....	Deed, A. A. Sheley, Act March 14, 1899.	2 00	
	Clevinger & Huls.....	Deed, A. J. Early, Act March 14, 1889	2 00	
	F. M. Moore.....	Deed, F. M. Moore, Act March 14, 1889.	2 00	
	Alexis Cope, Bursar...	Students' fees	7,655 60	
	R. H. McCloud.....	Deed, O. K. West, Act March 14, 1889.	2 00	7,750 10
March 3	Auditor of State.....	Req. No. 18 O. S. U. Fund		14,297 67
	C. W. Mesloh.....	1st and 2nd inst. rent.	36 00	
	C. U. Tel. Co.....	Overpaid charges	5 50	
	G. W. Noel.....	Note, I. G. Noel for lot 109, Scioto Co., and pt. lot 54, Pike Co	194 62	236 12
28	C. A. Grate.....	Broken apparatus	3 65	
	Auditor of State.....	State levy	14,241 50	
	Telfair & Telfair.....	Deed for V. M. lands.	2 00	
	Recorder Pike Co.....	" " " .	2 00	
	Prof. Hitchcock	Scrap iron and brass.	3 35	
	C. W. Mesloh.....	Rents	36 00	14,288 50
April 11	G. C. Rittenour.....	Deed, Act March 14, 1889	2 00	
	H. Alkire.....	Deed, Act March 14, 1889	2 00	
	B. F. Thomas.....	6th, 7th and 8th inst. ren 1898-9	127 50	
	Alexis Cope, Bursar...	Students' fees	3,511 02	3,642 52
	Auditor of State.....	Req. No. 20 O. S. U. Fund		13,961 50
	Com. Sinking Fund...	Int. on Endowment...		4,000 00
May 5	Auditor of State.....	Req. No. 21 O. S. U. Fund		13,894 00
	Col. Gas Co.....	Rebate	7 95	
	F. C. Clark.....	Donation Dept. Econ.	25 00	
	G. W. Knight.....	5th, 6th, 7th, 8th, and 9th inst. rent, 1897-8	187 50	
	J. M. Reeves.....	Deed, Act March 14, 1889	2 00	
	R. M. Saal.....	Deed, Act March 14, 1889	2 00	224 45
22	G. B. Kauffman.....	5th, 6th, 7th and 8th inst. rent, 1898-9....	180 00	
	G. B. Kauffman.....	Sale 50 store-room cards	250 00	430 00

STATEMENT I — Concluded.

Date.	From whom received.	For what purpose.	Amount.	Total.
1899.				
May 22	Auditor of State.....	Req. No. 22 O. S. U. Fund	13,884 00	
	Auditor of State.....	Req. No. 23 O. S. U. Fund	9,075 00	22,959 00
27	Feder, Holtzman & Co.	Proceeds $10,000 refunding bonds		10,797 75
June 17	Alexis Cope, Bursar...	Students' fees	769 08	
	G. B. Bitzer.....	Deed to Ellen Blair et al.....	2 00	
	G. B. Bitzer.....	Deed to E. A. Drake..	2 00	
	Standard Oil Co.....	Empty barrels	7 20	
	C. W. Mesloh.....	5th and 6th inst. rent, 1898–9	36 00	
	J. A. Bownocker.....	Alumni luncheon.....	38 00	
	R. E. Alspache.....	Duplicate diploma	1 50	855 78
	Auditor of State.....	Req. No. 24 O. S. U. Fund		792 35
28	Com. Sinking Fund...	Int. on Endowment...	7,799 85	
	Kilbourne & J. Mfg. Co.	Overcharge on invoice	1 50	
	W. H. Gilmore.....	Diploma fee (Class '98)	5 00	
	G. B. Kauffman.....	Sale store-room cards.	300 00	
	Clinton Nat. Bank.....	Overpm't of interest ..	562 50	
	B. F. Thomas.....	Breakage of instrum'ts	12 00	8,680 85
	Total receipts.....			$277,573 06

STATEMENT II.

DETAILED STATEMENT OF DISBURSEMENTS BY F. W. PRENTISS, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1899.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
June 30	By balance			$495 36
July 5	Clinton Natl. Bank	500 I. R. stamps	1	$10 00
7	R. M. Round, P. M.	Postage	2	50 00
8	Acme Paving Co.	Pavement	3	215 00
	Am. Battery Co.	Elect. app.	4	47 90
	Am. Dist. Tel. Co.	Messenger service	5	2 00
	Am. Harrow Co.	Casting	6	1 00
	W. Atkinson	7 2-3 hrs. labor	7	1 38
	J. W. Atwood	Livery service	8	3 00
	D. Bacon	Corn	9	36 27
	C. E. Barnet	Clerical services	10	76 00
	L. L. Beattie	Sewing	11	75
	H. S. Belden	40 hrs. labor	12	5 00
	Blackw'd, Green & Co.	Hardware sundries	13	35 29
	Thos. Boude	10 1-5 days' labor	14	15 30
	Borger Bros. & Co.	Ash pit, door and boiler	15	430 00
	E. Bradford	62½ hrs.' work	16	25 00
	E. Bradley	Farming implements	17	4 38
	H. Braun Sons & Co.	Oil, etc.	18	3 10
	J. C. Britton	20 hrs.' labor	19	3 00
	H. E. Brown & Sons	Material and labor	20	8 75
	Brown, Manly Pl'w Co.	1 cultivator	21	15 00
	Bryson, Bruba'k'r & Co	Insurance	22	35 18
	Wm. Burdell, Jr.	Harness supplies	23	13 15
	F. C. Caldwell	Salary and cash adv.	24	142 51
	Cap. City Mch. Wks.	Hardware sundries	25	36 80
	C. T. Howe	Music for com.	26	32 00
	J. P. Carlile	Cement	27	2 50
	Cent. Ohio Paper Co.	Printing and stationery	28	30 48
	Cent. U. Tel. Co.	Telephone service	29	44 40
	W. I. Chamberlain	Exp. meet'g trustees July 6	30	13 15
	Champlin Ptg. Co.	Printing and stationery	31	36 20
	F. Charles	Hauling	32	2 25
	Cherington P. & E. Co.	Dater, etc.	33	1 60
	Chittenden Hotel Co.	Board of C. W. Hiatt	34	4 25
	G. W. Clarke & Co.	Lumber	35	3 00
	E. A. Cole & Co.	Coal	36	3 11
	H. Cole & Co.	Blue print paper	37	1 00
	Col. Buggy Co.	Buggy	38	80 00
	Col. Cabinet Co.	Desks	39	32 90
	Col. Gas Co.	Mantels, etc.	40	4 20
	Col. Machine Co.	Machine parts	41	5 28
	Col. Rubber & Bltg. Co.	Hose, etc.	42	3 18
	Col. Supply Co.	Supplies	43	8 90
	Col. Tent & Awn. Co.	Canvass	44	9 00
	Col. Transfer Co.	Coupe service	45	1 75
	A. F. Conradi	91½ hrs.' labor	46	11 44
	O. T. Corson	Advertising	47	22 50
	G. D. Cross Lumber Co.	Lumber	48	11 56
	Crystal Ice Mfg. Co.	Ice	49	3 85
	C. E. Cummings	Lichens	50	3 10
	L. Davis & Son	Fencing	51	20 30
	DeLaval Separator Co.	Separator	52	300 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amo
1898.				
July 8	J. Dewey & Co.....	Lumber	53	
	A. Earl	"	54	
	Edgar P. Kaolin Co...	Clay	55	
	Chas. Engelhard.....	Scientific instruments.....	56	1
	Engelke & Bigelow....	Frieght and cartage	57	
	W. Erdman	40 hrs.' labor	58	
	J. A. Erner & Co.....	Labor and material	59	
	M. Evans	Flowers	60	
	H. A. Farnham.....	180 hrs.' labor	61	
	F. A. Faunce.....	Painting and papering	62	1
	F. A. Fish.....	80 hrs.' labor	63	
	Fitzpatrick & Co.....	Pipe covering and boiler...	64	3
	F. E. Fleischer.....	202 hrs. labor	65	
	C. D. Fleming.....	Shade trees	66	
	Franklin Toil. Sup. Co.	Towels furnished	67	
	A. G. Fritchey.....	Soap, etc.....	68	
	R. W. Funk.....	144 hrs.' work	69	
	Gabriel & Schall.....	Paris white	70	
	H. Gamper	210½ hrs.' labor	71	
	C. Garner	Corn	72	1
	J. J. Gheen.....	Plastering	73	
	W. Gilmore	33 hrs.' labor	74	
	H. Goldsmith	Repairs to band instrum'ts..	75	
	Green, Joyce & Co....	Ribbon	76	
	C. E. Gregory.....	Voltmeter	77	
	A. F. Hall.....	1 mo. and 90 hrs.' labor...	78	
	Far. Handy Wag. Co..	1 wagon	79	
	Hanna Pt. Mfg. Co..	Oil, etc.....	80	
	Hann & Adair.....	Printing	81	
	C. W. Harper.....	Etching, etc.....	82	
	Edw. Hauffe.....	40 hrs.' labor	83	
	P. Hayden Sd. Hd. Co.	Hdwe	84	
	Haydenv'e M. & M. Co.	Clay	85	
	J. Hertner	32 hrs.' labor	86	
	L. Hoster Brew. Co...	Sprouts	87	
	Jno. Immel & Son....	Repairs to milk wagon.....	88	
	F. Ingham	26 hrs.' labor	89	
	Maude D. Jeffrey.....	Clerical labor	90	
	F. S. Johnson	" "	91	
	Kauffman, Lattimer Co	Chemicals	92	
	M. Keith, Jr.....	23 hrs.' labor	93	
	G. D. Kellicott.....	Clerical services	94	
	Kelton & Converse....	Lumber	95	
	Kilbourne & J. Mfg. Co	Castings	96	
	Kimball & Matthews..	Chemicals	97	
	Krauss, Butler & B. Co.	Shades, etc	98	3
	W. E. Lamb.....	50 hrs.' labor	99	
	Landon Pt. & Pub. Co.	Printing	100	
	E. C. Livenspire.....	Horseshoeing	101	
	A. W. Livingston's Sns	Ensilage and peas	102	
	A. E. Loeb.....	146 hrs.' labor	103	
	N. W. Lord.....	Cash adv. for gas, etc.....	104	
	Mitchell Adv. Co.....	Time card	105	
	Chas. Mooney	163 hrs.' labor	106	
	A. D. Morely.....	12 "	107	
	Murray City Coal Co..	Coal	108	4

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
July 8	Jno. McAllister	Repair work	109	51 34
	McAllister, M. & Co.	Furniture, etc	110	26 41
	McClelland & Co.	1 band box	111	1 12
	R. E. McIntosh	77¾ hrs.' labor	112	9 60
	F. McKinney	32 hrs. as guide	113	4 00
	A. McLaughlin	38 hrs. work	114	5 70
	Nitschke Bros	Printing, etc	115	60 95
	K. Nurian	40 hrs.' labor	116	6 00
	Edw. Orton, Jr.	Cash adv. for labor	117	2 12
	F. Pavlicek	52 hrs. guide	118	6 50
	Payne, McD. Hdw. Co.	Hardware	119	40 78
	M. Peck	2 days' work	120	3 00
	Penn. Fuel Co.	Coal	121	8 40
	J. C. Perry	12 hrs.' labor	122	1 63
	Pickhardt & Kutroft.	Dye	123	1 00
	B. D. Potts	Hose	124	1 00
	Queen & Co.	Scientific instruments	125	36 10
	Quinius & Ridenour.	File cases	126	1 00
	E. S. Ream	5 hrs.' labor	127	63
	L. S. Wells	Mdse	128	50
	J. M. & W. Westwater.	Labor and material	129	16 50
	Z. L. White & Co.	Cheese cloth	130	1 00
	A. H. Reid	Dairy mchy	131	4 30
	J. S. Rine	Painting	132	33 50
	J. L. Roberts	15½ hrs.' labor	133	1 94
	F. O. Schoedinger	Zinc trays	134	3 85
	Schoedinger, F. & Co.	Hdwe	135	11 15
	R. J. Seymour	124 hrs.' guide	136	15 50
	Schilling Fdy. Co.	Castings	137	35 40
	G. S. Singer	2 burners	138	70
	D. F. Singleton	Brick laying	139	2 25
	C. C. Sleffel	Paint	140	2 00
	A. H. Smythe	Mail basket	141	40
	Southard & Wolf	Stationery	142	1 50
	Spahr & Glenn	Lining diplomas	143	23 50
	J. R. Spurrier	Labor and material	144	3 10
	J. Stanbrook	13 days' labor	145	19 50
	Standard Oil Co.	Oil	146	93 33
	G. E. Stechert	Books and magazines	147	17 71
	E. Stoughton	32 hrs.' janitor	148	4 80
	Strobridge Lith. Co.	Diplomas	149	105 00
	J. H. Randall	90½ hrs.' labor	150	22 63
	Tallmadge Hdw. Co.	Hdwe	151	38 79
	Taylor Mant. & G. Co.	Remodeling prest's office	152	151 00
	T. T. Tress	Repair on clocks	153	4 25
	G. Trowbridge	140 hrs.' labor	154	27 50
	Vogelgesang Furn. Co.	Repair furnace	155	6 19
	F. R. West	37 hrs.' guide	156	4 62
	West. U. Tel. Co.	Teleg. service	157	7 05
	A. F. Wilcox	254 hrs.' labor	158	38 10
	C. Woodruff	Labor and material	159	106 60
	Yost & Packard	Architect's service	160	100 24
	Webb Sta. & Ptg. Co.	Sundries	161	21 10
	J. Weisheimer	Grinding corn	162	9 90
	Col. Gas Co.	Gas	163	58 43
	Jos. Garretson	Salary, June, 1898	164	21 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
July 8	Oliver Davie	Davie Col. of Birds, N. Am.	165	400 00
	J. C. Perry	Salary, June, 1898	166	13 50
	J. McL. Smith	Exp. meet'g trustees	167	17 65
	J. T. Mack	" "	168	10 70
12	Blackw'd, Green & Co.	Bal. due on register	169	37 10
14	R. M. Rownd, P. M.	Postage	170	10 00
20	Harrison, Olds & Co.	Account legal services	171	1,000 00
30	J. H. Canfield	Salary, July, 1898	172	500 00
	Alexis Cope	" "	173	187 50
	W. C. McCracken	" "	174	150 00
	Jean Blackford	" "	175	54 17
	C. E. Barnet	" "	176	65 00
	E. D. Cockins	" "	177	58 33
	Chas. Low	" "	178	54 17
	W. Standley	" "	179	50 00
	B. LeBay	" "	180	50 00
Aug. 27	M. Peck	Salary, Aug., 1898	181	18 75
July 30	Geo. Rose	Salary, July, 1898	182	65 00
	J. Garretson	" "	183	30 00
	H. Martz	" "	184	45 00
	J. Kelley	" "	185	35 00
	Arthur Chantler	" "	186	40 00
	Jno. Brown	" "	187	40 00
	T. Osborne	" "	188	40 00
	D. D. Geren	" "	189	40 00
	W. Whitestine	" "	190	40 00
	H. Chantler	" "	191	40 00
	W. Townsell	" "	192	30 00
	J. Conrad	" "	193	40 00
	M. N. Cook	" "	194	40 00
23	Col. St. Ry. Co.	St. car tickets	195	5 00
	R. M. Rownd, P. M.	Stamped envelopes	196	88 64
29	R. J. Seymour	154 hrs.' work janitor@12½c	197	19 25
	D. M. Massie	Exp. trustee, May 2 to date	198	16 76
30	F. W. Prentiss	Salary for July, 1898	199	33 34
	F. J. Tyler	Salary Florist, July, 1898	200	40 00
	A. G. McCall	Serv. as janitor July, 1898	201	20 00
	J. C. Perry	" " "	202	12 50
Aug. 1	W. E. Kellicott	Boat and furniture	203	43 00
2	T. J. Godfrey	Exp. meet'gs, July 6 and Aug. 2	204	19 75
	L. B. Wing	Exp. meet'gs, June 13, July 6 and Aug 2	205	15 40
	B. Mickey	Work in library	206	9 70
3	G. G. Ball	" "	207	22 00
	Engelke & Bigelow	Freight and cartage	208	16 57
	G. L. Converse, Jr., As.	Lumber	209	18 58
	J. A. Erner & Co.	Elec. supplies	210	21 20
	Champlin Ptg. Co.	Printing	211	121 25
	Tallmadge Hdw. Co.	Hardware	212	21 18
4	Kelton & Converse	Lumber	213	103 36
	J. H. Randall	Labor	214	11 00
	McAllister, M. & Co.	Furniture	215	18 00
	Smith & Son	Apparatus	216	3 00
	W. S. Davis	Labor	217	9 65
	F. L. Landacre	Material for laboratory	218	30 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Aug. 4	Schoedinger, F. & Co..	Hardware	219	7 55
	Bausch L. Opt. Co....	Nosepieces	220	10 38
	C. T. Pfaff & Co.....	1 shade	221	2 50
	W. E. Lamb,.....	Labor	222	7 35
	H. Gamper	"	223	5 25
	Edw. Orton	Sundries	224	15 35
	Col. Gas Co.....	Coke	225	77 01
	Monypeny, H. Co....	Brushes and blacking	226	4 40
	A. H. Barber Mfg. Co.	Machine parts	227	293 29
	B. F. Thomas.....	Aparatus	228	42 90
	C. E. Haigh.....	X-ray apparatus	229	11 00
	J. B. Colt & Co.....	Apparatus	230	65 50
	Kraus, Butler & B. Co.	Shades	231	2 50
	Am. Grange Bulletin..	Advertising	232	16 80
	Sanders Pubg. Co....	"	233	29 40
	C. A. Williams' Studio.	Prints	234	3 12
	J. Dewey & Co.....	Lumber	205	6 55
	Davis & Son.....	Gate and fence	236	14 10
	Jo. Com. Med. & V. A.	Books	237	24 00
	Haussman & Dunn....	Instruments	238	9 35
	Harper Ill. Syn.....	Adv. cuts	239	16 45
	W. H. Scott.....	Expenses Ohio Coll. Ass'n.	240	10 50
	Domestic Laundry	Laundrying	241	63
	Webb Sta. & Ptg. Co..	Stationery	242	66 00
	India Alkali Wks.....	Savogran	243	19 18
	T. E. French.....	Lettering ctfs.....	244	1 80
	G. W. Knight.....	Expenses visit High School.	245	1 75
	Col. Sewer Pipe Co....	Drain tile	246	16 61
	Cent. U. Tel. Co.....	Telephone service	247	64 50
	Cher. Ptg. & Eng. Co..	Rubber stamps	248	1 00
	Standard Oil Co.....	Oil	249	30 60
	Tracy Wells Co.....	Mops, etc.....	250	6 00
	R. L. Polk & Co.....	City directory	251	5 00
	J. Q. Adams.....	Plumbers' supplies	252	40
	Am. Dist. Tel. Co.....	Signal boxes	253	27 00
	Seraphim B. Book Co.	Books and blanks	254	123 95
	G. E. Stechert.....	Books	255	194 88
	E. H. Barton.....	Labor	256	16 00
	Mathias Keith, Sr....	"	257	18 40
	J. Penn.....	Drayage	258	1 25
	Am. Trot. Reg. Assn..	Year books	259	16 50
	Boston Book Co.....	Books	260	70 74
	A. E. Loeb.....	Labor	261	29 57
	A. H. Smythe.....	Office supplies	262	9 50
	Ohio Furn. Co.....	Mirror	263	1 00
	The Globe Co.....	Drawer cards	264	3 50
	Boston Book Bdg. Co..	Binding	265	1 25
	E. Thompson Co.....	Books	266	42 00
	Robt. Clarke Co.....	"	267	10 00
	West Pub. Co.....	Magazines	268	37 50
	Helman, Taylor Co....	Books	269	20 76
	Macmillan & Co.....	"	270	1 00
	Burrows Bros. Co....	"	271	17 49
	Rubel Bros	"	272	2 50
	Tuttle, M. & Taylor...	Magazine	273	75
	J. Hopkins Press.....	Books	274	75
	D. Appleton & Co.....	"	275	5 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Aug. 4	L. C. Riddle	Labor	276	17 25
	Payne, McD. Hdw. Co.	Hardware	277	16 73
	H. E. Brown & Sons.	Printing	278	6 90
	Col. Brass Co.	Closet fixtures	279	20 60
	Palmer & Beck	Labor and material	280	107 55
	M. P. Streett	" "	281	146 45
	Watertown St. Eng. Co	Shieve	282	60
	A. F. Hall	Labor	283	31 50
	F. A. Fish	"	284	19 05
	G. R. Bott	"	285	5 25
	J. T. Frankenburg	"	286	10 45
	Chas. Voght	Painting and papering	287	56 00
	E. Huffe	Labor	288	24 00
	Geo. Trowbridge	"	289	17 13
	C. H. Woodruff	Labor and material	290	467 39
	G. W. McNabb	Gasoline	291	64
	Schaffer & Budenberg.	Counter	292	16 00
	F. A. Faunce	Painting and papering	293	50 00
	Elec. Appliance Co.	Elec. supplies	294	15 40
	Pitts Reduction Co.	Wire	295	15 93
	J. J. Gheen	Plastering	296	16 30
	McClelland & Co.	Office supplies	297	2 90
	J. M. & W. Westwater.	Elect. fixtures	298	20 00
	Cap. City Mch. Wks.	Machine parts	299	13 31
	Cent. Ohio Paper Co.	Stationery	300	39 64
	H. Braun Sons & Co.	nstruments and drugs	301	22 74
	A. S. W. Huffman.	Plumbers' supplies	302	13 90
	Col. Rubber & B. Co.	Mdse	303	14 19
	Miller Furn. Co.	Furniture	304	20 50
	Col. Supply Co.	Hdwe	305	450 73
	Murray City Coal Co.	Coal	306	15 79
	E. C. Livenspire	Horseshoeing, etc	307	9 00
	L. Fink	Papering	308	10 19
	J. Boyd	Truck	309	1 05
	R. McClure	Cases	301	47 55
	B. D. Potts	Pipe	311	35 85
	S. T. Hallsman	Painting	312	5 70
	J. Weisheimer	Grinding	313	6 20
	A. H. Taft	Bailing straw	314	53 72
	C. B. Steward	Meals	315	13 00
	W. A. Stephens	Horse training	316	10 00
	Creamery Pk. Mfg. Co.	Dairy supplies	317	103 81
	E. C. Duke	Sawing posts	318	5 18
	F. B. Mitchell	Threshing	319	32 98
	D. Bacon	Corn	320	52 45
	F. S. Johnston	Clerical service	321	26 05
	Hann & Adair	Printing	322	165 25
	Frankenberg Bros	Files	323	5 83
	Nitschke Bros	Paper and ptg	324	12 00
	Blackw'd, Green & Co.	Hdwe	325	21 38
	A. F. Wilcox	Labor	326	45 30
	G. D. Cross Lum. Co.	Lumber	327	7 68
	J. Patterson	Machine parts	328	90
	Crys. Ice M. & C. S. Co	Ice	329	1 20
	Jas. McOwen	Labor	330	16 15
	J. M. Leammon	Labor and team	331	16 50

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Aug. 4	B. M. Pierce	Labor	332	50
	C. C. Hayden	"	333	88
	C. N. Mooney	"	334	11 93
	H. L. Belden	"	335	7 50
	A. F. Conradi	"	336	6 44
	W. H. Gilmore	"	337	12 50
	J. C. Perry	"	338	2 38
	J. S. Teter	"	339	16 44
5	R. M. Rownd	Postage	340	20 00
13	C. A. Dye	Labor in store-room	341	78 00
	E. E. Harrold	" "	342	60 00
8	Col. Gas Co	Gas	343	28 28
	T. L. Griffin	Sal. as ass't in Ceramics	344	105 00
10	F. W. Prentiss	Bill Ex. G. Fock, books	345	5 26
27	W. C. Mills	Sal. for July and Aug., 1898	346	50 00
	J. H. Canfield	Salary for Aug., 1898	347	500 00
	Alexis Cope	" "	348	187 50
	W. C. McCracken	" "	349	150 00
	C. E. Barnet	" "	350	65 00
	J. Blackford	" "	351	54 17
	E. D. Cockins	" "	352	58 33
	F. W. Prentiss	" "	353	33 33
	Mrs. E. R. Hubler	" "	354	10 00
	Chas. Law	" "	355	54 17
	Wm. Standley	" "	356	50 00
	Benj. Lebay	" "	357	50 00
	Geo. Rose	" "	358	65 00
	H. Martz	" "	359	45 00
	Jas. Kelley	" "	360	35 00
	A. Chantler	" "	361	40 00
	J. Brown	" "	362	40 00
	T. Osborn	" "	363	40 00
	D. D. Geren	" "	364	40 00
	W. Whitestine	" "	365	40 00
	H. Chantler	" "	366	40 00
	J. Conrad	" "	367	40 00
	M. N. Cook	" "	368	40 00
	W. Trownsell	" "	369	20 00
	F. J. Tyler	" "	370	40 00
	A. G. McCall	" "	371	20 00
	J. C. Perry	" "	372	8 33
Sept. 5	Smith Premier Co	1 type writer and table	373	75 00
	W. I. Chamberlain	Exp. com. meet'g this day	374	10 50
6	T. J. Godfrey	" " "	375	9 50
9	Col. Gas Co	Gas	376	26 62
	J. C. Eno	Labor	377	6 25
	C. C. Wilcox	"	378	3 75
	H. Geren	"	379	3 75
	A. B. Myers	"	380	2 50
	A. Fleischer	"	381	1 00
	F. E. Fleischer	"	382	17 31
	K. Nurian	"	383	13 25
	J. H. Burgess	"	384	12 13
	R. Fitts	"	385	19 35
	H. L. Belden	"	386	21 31
	A. F. Wilcox	"	387	37 95

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amou
1898.				
Sept. 9	C. N. Mooney	Labor	388	31
	J. S. Teter	"	389	3
	W. H. Gilmore	"	390	2
	D. Donovan	Labor and team	391	14
	R. H. Cunningham	Labor	392	1
	J. L. Roberts	"	393	
	Peacock & King	Paper	394	3
	J. H. Randall	Carpentry	395	1
	Burgess S. Furn. Co.	Repairs	396	
	Sherwood Mfg. Co.	Cleaner	397	3
	Griffing Iron Co.	Radiators	398	10
	W. E. Case	Labor	399	1
	W. Britton	"	400	1
	Mitchell & Son	Marble	401	1
	Bourne & K. Mfg. Co.	Gaskets	402	
	F. A. Faunce	Painting	403	2
	The M. C. Lilley & Co.	Mdse	404	
	Col. Sew. Pipe Co.	Sewer pipe	405	
	J. C. Perry	Sal. for Aug., 1898, bal.	406	
	M. P. Streett	Masonry	407	2
	Jas. Stainbrook	Cleaning boiler	408	2
	Manhattan Concrete Co	Slate	409	5
	L. M. Ferguson	Rugs	410	1
	F. F. Bonnet	Clocks	411	
	C. T. Phillips	Paper	412	5
	Col. Pt. Mfg. Co.	Mdse	413	6
	McAllister, M. & Co.	Chairs	414	9
	J. W. Coulson & Co.	Paper paste	415	
	J. E. Deeter	Moving barn	416	5
	Col. Rubber & B. Co.	Supplies	417	19
	Lewis Fink	Picture rail	418	
	Chas. Vogt	Painting and papering	419	34
	J. J. Gheen	Plastering	420	1
	Col. Brass Co.	Supplies	421	12
	Murray Iron Works	Hdwe	422	15
	C. R. Hall	Labor	423	1
	H. Judd	Carpentry	424	2
	C. E. Barnet	Amanuensis work	425	
	Miller Furn. Co.	Stools	426	
	Jones & Laughlin	Steel	427	
	Fkl. Toilet Sup. Co.	Laundrying	428	
	W. Atkinson	Clerical work	429	
	H. Cole	Parchment	430	
	Jeffrey Mfg. Co.	Rope	431	
	E. H. Bailey	Labor	432	
	W. A. Knight	Labor in lab.	433	1
	W. Erdman	Carpentry	434	
	Builders Iron Fdy.	Venturi tube	435	7
	Dunn, Taft & Co.	Plush	436	
	T. Buchanan Co.	Machinery	437	
	L. S. Starrett Co.	Tools	438	1
	J. Wilckes	Econometer	439	6
	C. Riddle	Clerical work	440	
	W. Bohannon	Locks	441	
	Simmons Hdw. Co.	Hdwe	442	5
	J. E. Wing	Model of barn	443	

STATEMENT II -- Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Sept. 9	Deering Harvester Co.	Tools	443	58 79
	J. Weisheimer	Grinding corn	445	2 50
	S. T Hallsman	Painting	446	24 30
	S. Hard	Corn	447	20 05
	Kilbourne & J. Mfg. Co	Cart	448	6 50
	W. L. Whitehead	Cows	449	90 00
	J. H. Canfield	Cow	450	40 00
	J. Breck & Sons	Rake	451	67
	K. F. Kellerman	Labor on herbarium	452	12 30
	Cent. Ohio Paper Co.	Paper	453	28 80
	E. Leitz	Microscope	454	112 50
	L. C. Riddle	Mounting plants	455	21 00
	C. Bradley	Repairs	456	90
	C. Garner	Corn	457	16 28
	R. A. McClure	Sterilizer	458	24 00
	E. C. Livenspire	Horseshoeing	459	11 40
	R. J. Seymour	I. R. stamps	460	12 00
	E. C. Kissinger	Lime	461	4 10
	W. Burdell, Jr.	Harness	462	23 90
	F. S. Johnston	Clerical work	463	32 40
	H. S. King	Labor	464	36 08
	Beck & Orr	Blank books	465	3 00
	L. E. Wilson	Labor	466	33 18
	E. E. Harrold	Work in store-room	467	40 00
	C. A. Dye	" "	468	32 00
	A. F. Fenstermaker	Papering and ptg	469	23 75
	Am. Battery Co.	Elect. supplies	470	19 08
	J. A. Brashear	Cleaning instruments	471	5 00
	F. F. Howard	Work in library	472	4 50
	P. Hutton	" "	473	6 00
	Downing & Co.	Book	474	12 36
	Olive Jones	Charges adv. on books	475	2 00
	Taylor Mant. & G. Co.	Book cases	476	170 00
	Z. L. White & Co.	Screen	477	3 00
	C. Wilcox	Work in library	478	6 00
	Orange Judd & Co.	Advertising	479	15 00
	M. V. Dick Mgr.	"	480	10 00
	Westbote Co	Printing	481	133 49
	Nat. Stockman & F.	Advertising	482	50 40
	C. W. Harper	Advertising cuts	483	1 50
	D. C. Beggs Co.	Oil cloth	484	75
	G. Bruder	Salary band leader	485	30 00
	R. J. Seymour	Guide service	486	5 25
	F. C. McKinney	" "	487	20 00
	W. Bebb	Painting	488	86 00
	Mrs. E. R. Hubler	Clerical work	489	7 25
	W. H. Siebert	Expenses trip for library	490	26 93
	Col. Dispatch	Advertising	491	90
	O. S. Journal	"	492	75
	W. S. Orvis	Mineral ink	493	90
	Webb Sta. & Ptg. Co.	Mdse	494	25 00
	J. M. & W. Westwater.	Burners	495	2 00
	Nitschke Bros	Printing	496	37 10
	Kauffman Lattimer Co.	Disinfectant	497	42 00
	Cent. U. Tel. Co.	Telephone service	498	11 60
	Smith P. Typewr. Co.	Repairs	499	3 75

STATEMENT II — Continued.

Date.	To whom paid.	For wnat purpose.	No.	Amou
1898.				
Sept. 9	Postal Tel. Cable Co..	Teleg. service	500	
	Am. Dist. Tel. Co.....	Fire alarm boxes	501	3
	W. U. Tel. Co.....	Telegraph service	502	
	J. A. Erner & Co.....	Elec. supplies	503	
	Penna. Fuel Co.....	Coal	504	
	Pitts. Clay Mfg. Co...	Pipe cover	505	
	Golding & Sons Co...	Pebbles	506	
	Bonnot & Co.....	Repairs	507	1
	E. Orton, Jr.....	Labor	508	2
	Cap. City Mch. Wks..	Tools, hdwe, etc.....	509	18
	J. C. Perry.....	Labor	510	1
	Col. Supply Co.....	Supplies	511	11
	Tallmadge Hdw. Co..	Hdwe supplies	512	3
	Blackw'd, Green & Co.	" "	513	6
	Stitt, Price & Co.....	Clay and lime	514	
	Engelke & Bigelow....	Freight and cartage	515	2
	C. H. Woodruff.....	Carpentry	516	6
	G. W. Towbridge.....	"	517	6
	Schoedinger, F. & Co..	Tools and hdwe.....	518	1
	B. D. Potts.....	Hdwe	519	23
	Acme Paving Co.....	Paving	520	10
	Palmer & Beck.....	Spouting, etc.....	521	4
	F. Brewer	Labor	522	1
	T. Boude	"	523	1
	Standard Oil Co.....	Oil	524	
	Kelton & Converse....	Lumber	525	2
	Champlin Ptg. Co.....	Printing	526	4
	Flint & W. Mfg. Co...	Tank	527	2
	Elliot & Maclean.....	Lumber	528	3
	A. H. Smythe.....	Office supplies	529	2
	F. Charles	Freight and cartage	530	
	J. B. Colt & Co.....	Lantern	531	2
	J. Garretson	Sal. for Aug., 1898.....	532	3
14	R. C. Purdy.....	Chargeable to scholarship in Ceramics	533	1
15	W. D. Gibbs.....	Salary for summer, 1898...	534	10
16	R. M. Rownd, P. M...	Postage	535	1
	C. H. Woodruff.....	Fitting up chem. lab.....	536	20
17	M. J. Kellenberger....	Asst. dept. dom. scie.....	537	
	H. A. Weber.....	Salary for Sept., 1898.....	538	22
19	A. C. Purdy.....	Ceramics scholarship	539	
21	J. McL. Smith.....	Exp. meet'g, 21 Sept.....	540	
	W. I. Chamberlain....	" "	541	1
	L. B. Wing.....	" "	542	1
24	W. C. Weir.....	Sal. Sept. inst., 1898.....	543	2
	J. H. Canfield.....	Salary for Sept., 1898.....	544	50
	Alexis Cope	" "	545	18
	C. E. Barnet.....	" "	546	6
	Jean Blackford.....	" "	557	5
	E. D. Cockins.....	" "	548	5
	W. C. McCracken.....	" "	549	15
22	T. F. Hunt.....	Salary Sept. 1898, inst.....	550	25
24	D. A. Kohr.....	" "	551	1
22	A. M. Bliele.....	" "	552	22
	W. A. Kellerman.....	" "	553	22
	W. McPherson	" "	554	22

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Sept. 22	C. N. Brown	Salary, Sept. 1898, inst.	555	225 00
	A. C. Barrows	" "	556	225 00
	Edw. Orton	" "	557	225 00
	E. A. Eggers	" "	558	225 00
	J. R. Smith	" "	559	225 00
	G. W. Knight	" "	560	225 00
	W. R. Lazenby	" "	561	225 00
	F. E. Sanborn	" "	562	225 00
	S. C. Derby	" "	563	225 00
	W. F. Hunter	" "	564	225 00
	R. D. Bohannan	" "	565	225 00
	W .T. Magruder	" "	566	225 00
	J. P. Gordy	" "	567	225 00
	W. H. Scott	" "	568	225 00
	B. F. Thomas	" "	569	225 00
	J. V. Denney	" "	570	225 00
	B. L. Bowen	" "	571	225 00
21	H. Osborn	" "	572	225 00
	N. W. Lord	" "	573	200 00
	F. A. Ray	" "	574	200 00
	G. B. Kauffman	" "	575	200 00
	E. Orton, Jr.	" "	576	180 00
	J. N. Bradford	" "	577	180 00
	G. W. McCoard	" "	578	160 00
	H. C. Lord	" "	579	160 00
	E. A. Hitchcock	" "	580	150 00
	C. P. Linhart	" "	581	160 00
	D. S. White	" "	582	150 00
	W. D. Gibbs	" "	583	140 00
	P. G. Bowman	" "	584	140 00
	F. C. Caldwell	" "	585	140 00
	F. C. Clark	" "	586	135 00
	W. H. Page	" "	587	135 00
	S. A. Norton	" "	588	120 00
	R. I. Fulton	" "	589	120 00
	W. H. Siebert	" "	590	120 00
	O. B. Jones	" "	591	120 00
	J. E. Boyd	" "	592	120 00
	E. B. Kinkead	" "	593	110 00
	J. R. Taylor	" "	594	110 00
	C. E. Sherman	" "	595	100 00
	T. E. French	" "	596	100 00
	C. W. Mesloh	" "	597	100 00
	C. L. Arnold	" "	598	100 00
	K. D. Swartzel	" "	599	100 00
	A. W. Hodgman	" "	600	100 00
	W. A. Knight	" "	601	95 00
	C. W. Weick	" "	602	95 00
	C. C. Sleffel	" "	603	95 00
	J. H. Schaffner	" "	604	90 00
	C. W. Foulk	" "	605	90 00
	J. A. Bownocker	" "	606	90 00
	C. A. Dye	" "	607	90 00
	W. L. Graves	" "	608	90 00
	J. S. Hine	" "	609	85 00
	F. L. Landacre	" "	610	85 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Sept. 21	A. E. Vinson	Salary, Sept. 1898, inst	611	80 00
	E. N. Van Harlingen	" "	612	80 00
	M. P. Brush	" "	613	80 00
	C. Wissler	" "	614	80 00
	S. M. Elliott	" "	615	75 00
	E. O. Randall	" "	616	70 00
	D. F. Pugh	" "	617	70 00
	E. E. Harrold	" "	618	70 00
	N. H. Brown	" "	619	70 00
	E. E. Somermeier	" "	620	65 00
	F. Ruhlen	" "	621	60 00
	T. F. Lewis	" "	622	60 00
	A. F. Hall	" "	623	60 00
24	W. F. Lavery	" "	624	60 00
	C. B. Fredericks	" "	625	60 00
	H. Townshend	" "	626	55 00
	J. F. Cunningham	" "	627	54 00
	R. E. McIntosh	" "	628	10 00
	G. D. Kellicott	" "	629	50 00
	M. D. Jeffrey	" "	630	50 00
	F. K. Luke	" "	631	48 00
	D. C. Huddleson	" "	632	50 00
	A. V. Bleininger	" "	633	40 00
	M. Dresbach	" "	634	30 00
	F. A. Fish	" "	635	30 00
	A. H. McIntire	" "	636	30 00
	E. L. Ball	" "	637	30 00
	S. E. Rasor	" "	638	30 00
	H. Judd	" "	639	30 00
	F. J. Hale	" "	640	30 00
	J. B. Parker	" "	641	30 00
	E. L. Fullmer	" "	642	25 00
	Robt. Fischer	" "	643	25 00
	F. O. Clements	" "	644	25 00
	G. W. Knight	" "	645	25 00
	W. F. Hunter	" "	646	25 00
	A. G. McCall	" "	647	24 00
	L. Allen	" "	648	40 00
	O. V. Brumley	" "	649	20 00
	F. F. D. Albery	" "	650	15 00
	J. H. Collins	" "	651	10 00
	F. W. Prentiss	Salary Sept., 1898	652	33 33
	Mrs. E. R. Hubler	" "	653	20 00
	W. C. Mills	" "	654	25 00
	Chas. Low	" "	655	54 17
	W. Standley	" "	656	50 00
	B. Lebay	" "	657	50 00
	B. F. Maag	" "	658	30 00
	T. Boude	" "	659	45 00
	M. Peck	" "	660	40 00
	Geo. Rose	" "	661	65 00
	H. Martz	" "	662	45 00
	J. Kelly	" "	663	35 00
	A. Chantler	" "	664	40 00
	T. S. Edgington	" "	665	40 00
	J. F. Longman	" "	666	40 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Sept. 24	J. H. Brown	Salary Sept., 1898	667	40 00
	D. D. Geren	" "	668	40 00
	T. E. Osborn	" "	669	40 00
	W. Whitestine	" "	670	40 00
	H. Chantler	" "	671	40 00
	W. Townsell	" "	672	25 00
	J. C. Perry	" "	673	12 50
	J. Conrad	" "	674	40 00
	M. N. Cook	" "	675	40 00
	G. W. Elwell	Salary Sept., 1898, inst.	676	40 00
	D. Flanagan	Refund of fees	677	7 50
	R. C. Purdy	Salary Sept., 1898, inst.	678	20 00
	Mrs. M. J. Kellenberger	" week end'g Sept. 20.	679	4 00
	E. H. Bailey	" Sept., 1898, inst.	680	15 00
	R. M. Rownd, P. M.	Stamps	681	8 50
	V. E. Kellicott	Coll. of Odonata	682	300 00
	Paul Jones	Exp. meet'g trustees	683	5 45
	J. H. Vosskuehler	Salary Sept., 1898, inst.	684	30 00
29	Mrs. M. J. Kellenberger	" week end'g Sept. 29, 1898	685	4 00
Oct. 1	W. G. Worcester	Refund of fees, soldier	686	4 00
	J. Garretson	Salary Sept., 1898	687	36 00
3	R. M. Rownd, P. M.	Postage for library	688	25 00
4	R. J. Seymour	Int. Rev. stamps	689	10 00
8	F. J. Pavlicek	Guide and mess. service	690	7 00
	F. C. McKinney	" "	691	6 25
	M. Snow	" "	692	1 00
	F. R. West	" "	693	6 75
	Press Post Ptg. Co.	Advertising	694	2 25
6	Mrs. M. J. Kellenberger	Services as maid	695	4 00
8	Cent. Ohio Oil Co.	Grease	696	3 25
	Col. Dispatch	Advertising	697	1 50
	O. S. Journal Co.	"	698	1 50
	Cher. Ptg. & Eng. Co.	Dater	699	1 00
	Quinius & Ridenour	Files	700	1 00
	Tracy Wells Co.	Brooms, etc	701	21 32
	Southard Ptg. Co.	Printing	702	1 50
	West. Union Tel. Co.	Telegrams	703	3 57
	Cent. U. Tel. Co.	Telephone service	704	75 73
	Mrs. E. R. Hubler	Clerical work	705	15 25
	A. McLaughlin	" "	706	6 37
	Postal Tel. Cable Co.	Telegraph service	707	1 96
	Am. Dist. Tel. Co.	Signal box rent	708	27 00
	W. S. Orvis	Mimeo paper	709	1 75
	Standard Oil Co.	Oil	710	7 46
	Eaton Mch. Wks.	Forging	711	2 85
	Webb Ptg. & Sta. Co.	File boxes	712	24 50
	J. W. Bannon	Printing brief	713	28 00
	Kilbourne Jones Co.	Hardware	714	50
	H. J Holcomb	Painting	715	9 00
	Batterson Dec. House.	Decorating rooms	716	128 00
	D. Spencer & Son.	Carpentry and masonry	717	104 00
	Battle Cr St. Pum. Co.	Valve regulator	718	55 00
	J. Schofield	Paints	719	4 75
	C. T. Phillips	Paper and supplies	720	4 03
	W. H. Peters	Papering	721	25 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 8	F. F. Bonnet	Clock	722	5 00
	J. J. Gheen	Plastering	723	25 50
	W. Atkinson	Labor	724	2 61
	Peacock & King	Paper	725	5 16
	Col. Brass Co	Urinal	726	14 10
	Richmond Chair Co	Chairs	727	168 13
	F. Charles	Freight and drayage	728	75
	G. R. Bott	Labor	729	2 75
	F. A. Fish	"	730	5 20
	W. Morelan	Carpentry	731	1 20
	F. W. Taylor	Labor	732	60
	Wheeler Con. & En. Co	Tubes	733	2 80
	Weekly Law Bulletin	Advertising	734	25 00
	O. T Corson	"	735	22 50
	Lawrence Pub. Co	"	736	68 04
	R. R. Bowker	Books	737	7 00
	Dodd, Mead & Co	"	738	35 00
	Library Bureau	Library supplies	739	6 50
	G. E. Stechert	Books	740	122 63
	Am. Trot. Reg. Assn.	"	741	3 00
	Globe Co	Library furniture	742	24 60
	H. H. Ballard	Slip binders	743	1 03
	Gaylord Bros	Paper	744	35
	J. Hertner	Labor	745	2 94
	Boston Book Co	Journals	746	61 00
	Burrows Bros. Co	Books	747	256 47
	Seraphim Blank Bk. Co	Binding	748	170 90
	H. S. Belden	Labor	749	9 31
	J. Phillips	"	750	1 12
	D. W. Galehouse	"	751	1 25
	J. C. Long	"	752	1 25
	S. Meiche	"	753	2 50
	A. H. Snyder	"	754	1 25
	J. R. Greenlee	"	755	1 43
	H. A. Clark	"	756	1 94
	E. C. Cotton	"	757	1 87
	E. W. Nettleton	"	758	1 25
	L. A. Kolbe	"	759	1 18
	J. W. Brinker	"	760	1 25
	J. S. Jones	"	761	1 25
	A. E. Day	"	762	5 50
	W. Atherton	"	763	1 62
	J. G. Ridinger	"	764	62
	L. C. Hoover	"	765	62
	R. J. Palmer	"	766	1 25
	J. H. Burgess	"	767	5 87
	J. S. Teter	"	768	10 62
	W. H. Gilmore	"	769	5 00
	R. Fitts	"	770	8 25
	I. I. Eno	"	771	5 62
	K. Nurain	"	772	8 12
	C. Mooney	"	773	9 30
	A. F. Wilcox	"	774	40 50
	J. C. Perry	"	775	2 62
	A. Fleischer	"	776	12 50
	J. L. Roberts	"	777	62

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 8	D. Donavin	Labor	778	30 00
	Fritsch Mfg. Co.	Grate	779	2 50
	Acme Pav. Co.	Pavement	780	15 00
	E. H. Barton.	Carpentry	781	2 25
	M. Keith, Sr.	"	782	1 75
	Fitzpatrick & Hoepfner	Balance, steam heating	783	15 00
	S. H. Ruhlen.	Seed	784	17 50
	A. Speare's Sons & Co.	Asbestine	785	4 00
	Miller Furn. Co.	Mirrors	786	12 00
	G. W. Clarke & Co.	Lumber	787	4 00
	Cross Lumber Co.	"	788	5 94
	Wm. Burdell, Jr.	Harness	789	9 20
	C. S. Bradley.	Milk can	790	2 25
	J. H. Canfield.	Hay	791	9 00
	Star Milk Cooler Co.	Strainer	792	6 40
	F. S Johnston.	Clerical work	793	24 60
	J. Dewey & Co.	Lumber	794	56 25
	J. Weisheimer	Cob meal	795	21 50
	L. Hoster Brew Co.	Sprouts	796	4 52
	G. W McNall	Soap	797	4 02
	Murray City Coal Co.	Coal	798	28 59
	J. H. Zinn.	Lumber	799	10 79
	Spencer Lens Co.	Microscopes	800	120 80
	H. Cole	Geisler tubes	801	6 00
	J. P. Friez.	Thermos	802	9 25
	Fauth & Co.	Repairs	803	10 75
	Landon Ptg. & Pub. Co	Printing	804	1 75
	W. C. Mills.	Postage	805	2 79
	E. C. Kissinger.	Sand	806	3 00
	E. T. Jenks.	Locks	807	10 00
	F. O. Haines.	Herbarium cases	808	229 58
	F. J. Tyler.	Labor	809	4 12
	F. Detmers	"	810	14 00
	L. C. Riddle.	"	811	10 50
	Scioto Fire Brick Co.	Shade	812	1 50
	T. J. Dundon & Co.	Sawdust	813	1 00
	E. Orton, Jr.	Cash adv. for rubber	814	50
	J. McAllister	Labor	815	21 88
	Buff & Berger.	Transit	816	232 25
	Howald & Conklin.	Furniture	817	34 50
	Spahr & Glenn.	Printing	818	5 50
	F. C. Clark.	Cash adv. for drayage	819	1 00
	General Elect. Co.	Ammeter	820	11 25
	R. E. McIntosh.	Labor	821	3 50
	J. A. Bownocker.	Expense collecting tour	822	17 35
	Ward's Nat. Scj. Est.	Anatomies	723	142 25
	E. G. Webster.	Labor	724	97
	L. E. Wilson.	"	725	17 50
	Haydenv'le M. & M. Co	Clay	726	1 25
	Case Mfg. Co.	Pulleys	727	8 50
	Jas. Foley & Co.	Oil cans	728	4 60
	Starrett & Co.	Rule	729	1 94
	E. A. Kinsey & Co.	Hdwe supplies	830	38 52
	P. Hayden S. Hdw. Co	Iron	831	102 56
	Col. Varnish Co.	Shellac	832	7 00
	Hanna Pt. Mfg. Co.	Paint	833	1 90

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 8	F. E. Sanborn.....	Postage	834	2 65
	F. Huddleson	Labor	835	1 50
	W. H. Anderson.....	C. C. reports	836	26 00
	E. Thompson Co.....	Encyclopædia of Law.....	837	6 00
	W. Wrigley, Jr. & Co..	Book-case	838	7 95
	H. Chantler	Freight	839	1 00
	L. McCormick	Frames	840	1 75
	A. F. Fenstermaker...	Labor	841	47 00
	Shilling Fdy. Co.....	Castings	842	3 50
	J. H. Williams.....	Forgings	843	3 75
	Jeffrey Mfg. Co.....	Rope	844	7 25
	Crosby Stm G. & V.Co.	Instruments	845	6 50
	Stitt, Price & Co.....	Cement	846	1 00
	G. W. Rightmire.....	Salary Sept., 1898, inst....	847	20 00
	Ashton Valve Co.....	Repairs	848	2 66
	J. G. Pulling & Co....	Spring	849	70
	E. Doddington	Mdse	850	16 69
	M. Grau & Co.....	Pulleys and shafting	851	17 14
	Lodge & Shipley.....	Lathe	852	295 20
	F. J. Hale.....	Labor	853	25 90
	H. Judd	"	854	83 75
	Dunn, Taft & Co.....	Dry goods	855	2 01
	McCallip F. & W. Wks.	Wire screen	856	6 40
	E. H. Bailey.....	Labor	857	13 35
	E. G. Bailey.....	"	858	4 88
	Heller & Co.....	Steel boxes	859	3 10
	Lunkenheimer Co.....	Valves	860	24 60
	S. Smith	Blacking and brushes	861	3 10
	E. G. Willyoung & Co.	Sci. instruments	862	13 19
	Peacock & King.....	Paper	863	7 25
	R. W. Bock.....	Lettering	864	2 00
	W. F. Lavery.....	Labor repairing	865	33 75
	J. H. McClintock.....	Labor	866	30 00
	T. J. O'Neil.....	Mattress	867	23 55
	M. J. Bergin Lumb. Co.	Lumber	868	8 98
	Lynas Bros	Jars	869	1 12
	W. F. Mann & Co....	Grinding	870	1 00
	H. B. Brown & Sons..	Printing	871	3 75
	A. E. Loeb.....	Labor	872	6 95
	M. Staley	"	873	1 06
	W. E. Case.....	"	874	39 75
	Geo. Trowbridge	Carpentry	875	34 74
	C. H. Woodruff.....	" and material	876	97 25
	J. T. Frankenberg.....	Labor	877	10 95
	H. R. Powell.....	Clerical work	878	11 20
	Fkl. Toilet Sup. Co...	Laundry	879	30 16
	A. D. Morely.....	Carpentry	880	28 25
	H. M. Andress.....	Labor	881	1 68
	W. Erdman	"	882	9 98
	S. T. Hallsman.....	Painting	883	22 50
	J. H. Randall.....	Carpentry	884	73 76
	H. Butenschoen	Lettering	885	9 25
	R. J. Seymour.....	Labor	886	15 27
	K. Nurian	Salary September, 1898....	887	7 50
	H. Gamper	" "	888	7 50
	Engelke & Bigelow....	Freight and drayage	889	68 12

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 8	J. L. Trauger	Binding	890	2 25
	Col. Supply Co.	Hdwe supplies	891	163 87
	Krauss, Butler & B. Co	Matting and shades	892	56 60
	C. Vogt	Papering and painting	893	38 51
	Yardley & Harsh	Office supplies	894	5 57
	H. Braun Sons & Co.	Oils	895	16 57
	Tallmadge Hdw Co.	Hdwe	896	100 83
	D. C. Beggs Co.	Shades and linoleum	897	134 61
	McAllister, M. & Co.	Furniture	898	106 15
	Cap. City Mch. Wks.	Hdwe	899	71 94
	Kelton & Converse.	Lumber	900	82 12
	McClelland & Co.	Stationery	901	28 75
	Blackw'd, Green & Co.	Hdwe	902	17 34
	Nitschke Bros	Printing	903	37 78
	J. A. Erner & Co.	Elec. supplies	904	15 68
	Z. L. White & Co.	Mdse	905	3 46
	A. H. Smythe	Stationery	906	2 50
	Hann & Adair	Printing	907	90 72
	Payne & McD. Hw. Co.	Hdwe	908	105 23
	Schoedinger, F. & Co.	"	909	6 43
	J. M. & W. Westwater.	Elect. fixtures	910	12 00
	Elliot & Maclean	Lumber	911	42 99
	Cent. Ohio Paper Co.	Paper	912	10 60
	Col. Pt. Mfg. Co.	Paint	913	27 50
	Col. Rubber & B. Co.	Belting and waste	914	45 94
	A. W. Livingston's Sns	Seeds	915	10 18
	Champlin Ptg. Co.	Printing	916	133 80
	C. W. Harper	Illustrating cuts	917	4 25
	Col. Gas Co.	Gas	918	54 30
	F. C. Caldwell	Salary sup. plant and cash adv	919	151 27
	Bausch & Lamb	Microscopes	920	185 72
	J. T. Martin	½ salary June, 1898	921	20 00
	F. W. Prentiss	B-E. Mayer & Muller	922	550 32
13	R. M. Rownd, P. M.	Stamps	923	4 00
	Col. St. Ry. Co.	St. car tickets	924	5 00
	Col. Water Works.	Water 6 months end. Nov. 1, 1898	925	607 46
17	Mrs. M. J. Kellenberger	Services as maid	926	4 00
	O. L. Vandament	Labor	927	2 09
	J. Mergler	"	928	1 25
	Lily Weeks	Salary Oct. 10-17	929	5 00
20	Mrs. M. J. Kellenberger	" 11-18	930	4 00
25	Lily Weeks	" 17-24	931	5 00
26	R. M. Rownd, P. M.	Postage	932	49 16
29	J. L. Roberts	Fees refunded	933	2 00
	C. C. Hayden	"	934	2 00
	M. F. Miller	"	935	2 00
	A. G. McCall	"	936	2 00
	J. H. Canfield	Salary Oct. 1898	937	500 00
	Alexis Cope	" "	938	187 50
	C. E. Barnett	" "	939	65 00
	F. W. Prentiss	" "	940	33 33
	Jean Blackford	" "	941	54 17
	E. D. Cockins	" "	942	58 33
	T. F. Hunt	Salary Oct. 1898, inst.	943	250 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	A
1898.				
Oct. 29	W. F. Hunter.....	Salary Oct., 1898, inst.....	944	
	G. W. Knight.....	" "	945	
	W. A. Kellerman.....	" "	946	
	Wm. McPherson	" "	947	
	C. N. Brown.....	" "	948	
	A. C. Barrows.....	" "	949	
	E. Orton, Sr.....	" "	950	
	E. A. Eggers.....	" "	951	
	J. R. Smith.....	" "	952	
	H. A. Weber.....	" "	953	
	W. R. Lazenby.....	" "	954	
	F. E. Sanborn.....	" "	955	
	S. C. Derby.....	" "	956	
	A. M. Bleile.....	" "	957	
	A. D. Bohannan.....	" "	958	
	W. F. Magruder.....	" "	959	
	J. P. Gordy.....	" "	960	
	W. H. Scott.....	" "	961	
	B. F. Thomas.....	" "	962	
	J. V. Denney.....	" "	963	
	B. L. Bowen.....	" "	964	
	H. Osborn	" "	965	
	N. W. Lord.....	" "	966	
	F. A. Ray.....	" "	967	
	G. B. Kauffman.....	" "	968	
	E. Orton, Jr.....	" "	969	
	J. N. Bradford.....	" "	970	
	G. W. McCoard.....	" "	971	
	C. P. Linhart.....	" "	972	
	H. C. Lord.....	" "	973	
	E. A. Hitchcock.....	" "	974	
	D. S. White.....	" "	975	
	W. D. Gibbs.....	" "	976	
	P. G. Bowman.....	" "	977	
	F. C. Caldwell.....	" "	978	
	F. C. Clark.....	" "	979	
	W. H. Page.....	" "	980	
	S. A. Norton.....	" "	981	
	R. I. Fulton.....	" "	982	
	W. H. Siebert.....	" "	983	
	O. B. Jones.....	" "	984	
	J. E. Boyd.....	" "	985	
	E. B. Kinkead.....	" "	986	
	J. R. Taylor.....	" "	987	
	C. E. Sherman.....	" "	988	
	T. E. French.....	" "	989	
	C. W. Mesloh.....	" "	990	
	C. L. Arnold.....	" "	991	
	K. D. Swartzel.....	" "	992	
	A. W. Hodgman.....	" "	993	
	W. A. Knight.....	" "	994	
	C. W. Weick.....	" "	995	
	C. C. Sleffel.....	" "	996	
	J. H. Schaffner.....	" "	997	
	C. W. Foulk.....	" "	998	
	J. A. Bownocker.....	" "	999	

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 29	C. A. Dye	Salary Oct., 1898, inst	1000	90 00
	W. L. Graves	" "	1001	90 00
	J. S. Hine	" "	1002	85 00
	F. L. Landacre	" "	1003	85 00
	A. E. Vinson	" "	1004	80 00
	E. M. Van Harlingen	" "	1005	80 00
	M. P. Brush	" "	1006	80 00
	Clark Wissler	" "	1007	80 00
	S. M. Elliott	" "	1008	75 00
	E. O. Randall	" "	1009	70 00
	D. F. Pugh	" "	1010	70 00
	E. E. Harrold	" "	1011	70 00
	N. H. Brown	" "	1012	70 00
	E. E. Somermeier	" "	1013	65 00
	F. Ruhlen	" "	1014	60 00
	T. K. Lewis	" "	1015	60 00
	A. F. Hall	" "	1016	60 00
	W. F. Lavery	" "	1017	60 00
	C. B. Fredericks	" "	1018	60 00
	H. Townshend	" "	1019	55 00
	J. F. Cunningham	" "	1020	54 00
	G. D. Kellicott	" "	1021	50 00
	M. D. Jeffrey	" "	1022	50 00
	A. V. Bleininger	" "	1023	40 00
	Lucy Allen	" "	1024	40 00
	M. Dresbach	" "	1025	30 00
	F. A. Fish	" "	1026	30 00
	A. H. McIntire	" "	1027	30 00
	E. L. Ball	" "	1028	30 00
	S. E. Rasor	" "	1029	30 00
	H. Judd	" "	1030	30 00
	F. J. Hale	" "	1031	30 00
	J. B. Parker	" "	1032	30 00
	B. J. Maag	" "	1033	30 00
	J. H. Voskuehler	" "	1034	30 00
	E. L. Fullmer	" "	1035	25 00
	Robt. Fischer	" "	1036	25 00
	F. O. Clements	" "	1037	25 00
	O. V. Brumley	" "	1038	20 00
	R. C. Purdy	" "	1039	20 00
	G. K. Rightmire	" "	1040	20 00
	E. H. Bailey	" "	1041	15 00
	F. F. D. Albery	" "	1042	15 00
	J. H. Colins	" "	1043	10 00
	D. A. Kohr	" "	1044	10 00
	R. E. McIntosh	" "	1045	10 00
	H. Gamper	" "	1046	7 50
	W. C. McCracken	Salary Oct., 1898	1047	150 00
	Geo. Rose	" "	1048	65 00
	Chas. Low	" "	1049	54 17
	W. Stanley	" "	1050	50 00
	Benj. LeBay	" "	1051	50 00
	Thos. Boude	" "	1052	45 00
	W. H. Case	" "	1053	45 00
	H. Martz	" "	1054	45 00
	M. Peck	" "	1055	40 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Oct. 29	F. K. Luke	Salary Oct., 1898	1056	32 00
	A. Chantler	" "	1057	40 00
	J. F. Longman	" "	1058	40 00
	J. H. Brown	" "	1059	40 00
	D. D. Geren	" "	1060	40 00
	W. Whitestine	" "	1061	40 00
	H. Chantler	" "	1062	40 00
	Geo. Denney	" "	1063	40 00
	M. H. Cook	" "	1064	40 00
	T. S. Edgington	" "	1065	40 00
	T. E. Osborn	" "	1066	40 00
	Jas. Kelly	" "	1067	35 00
	D. C. Huddleson	" "	1068	50 00
	W. C. Mills	" "	1069	25 00
	Mrs. E. R. Hubler	" "	1070	20 00
	Wash. Townsell	" "	1071	25 00
	W. C. Weir	" "	1072	20 00
	J. C. Perry	" "	1073	12 50
	G. W. Elwell	" "	1074	40 00
	A. G. McCall	" "	1075	16 00
	H. H. Loomis	Fees refunded	1076	2 00
	Joe Garretson	Salary Oct. 1, 29, 1898	1077	39 00
	K. Nurian	" 1898	1078	11 25
31	Lily Weeks	" 24, 31	1079	5 00
Nov. 1	Kuhn Art Stone Co.	Est. on cem. work	1080	700 00
2	Mrs. M. J. Kellerman	Services dept. dom. sci	1081	8 00
3	F. J. Pavlicek	Guide and mess. service	1082	8 00
	V. Martz	" "	1083	2 75
	J. F. Travis	" "	1084	7 87
	F. C. McKinney	" "	1085	6 62
	M. Snow	" "	1086	7 37
	F. R. West	" "	1087	1 75
	Cent. Ohio Oil Co.	Oil	1088	9 27
	Alexis Cope	Exp. in Page will case	1089	2 35
	Press Post Ptg. Co.	Advertising	1090	1 50
	W. S. Orvis	Mimeograph ink	1091	90
	Cent. Ohio Paper Co.	Paper	1092	2 00
	Tracy Wells Co.	Sundry notions	1093	5 00
	Monypeny Ham'nd Co.	Mdse	1094	4 00
	Webb. Sta. & Ptg. Co.	Office supplies	1095	4 25
	Jas. Schofield	Paint	1096	5 00
	H. W. Johns Mfg. Co.	Pipe covering	1097	11 00
	J. M. & W Westwater.	Lights	1098	1 20
	W. F. Brown	Steam traps	1099	33 00
	D'Esté & Seeley Co.	Valve and regulator	1100	2 80
	McAllister, M. & Co.	Rattan couch	1101	7 50
	P. Beck	Hdwe	1102	10 96
	Vogelgesang Furn. Co.	Furnaces	1103	248 46
	Schiff, Jordan & Co.	Carbons	1104	26 25
	Elec. Appliance Co.	Elect. supplies	1105	13 25
	Lewis Fink	Papering	1106	63 75
	Jeffrey Mfg. Co.	Hardware	1107	25 35
	J. S. Abbott & Co.	Glass	1108	3 40
	R. E. McIntosh	Labor	1109	4 16
	D. K. Starbuck	"	1110	5 06
	M. L. Blose	"	1111	4 10

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Nov. 5	J. Hertner	Labor	1112	6 88
	M. C. Hunter	"	1113	11 03
	J. W. Green	"	1114	1 56
	J. Stainbrook	"	1115	3 75
	C. Pixler	"	1116	11 70
	Col. Brass Co.	Plumbers' supplies	1117	24 00
	Agricultural Student	Advertising	1118	20 00
	L. T. Williams	Work in library	1119	18 00
	H. B. Farnham	" "	1120	3 30
	Lucy Allen	Lettering	1121	3 00
	B. Herman	Work in library	1122	7 40
	E. S. Werner	Books	1123	15 35
	Boston Book Co.	"	1124	90 00
	Concilio Bibliographico	Division cards	1125	14 97
	C. A. Curtis	Expansive classification	1126	5 00
	Burrows Bros. Bk. Co.	Books	1127	72 16
	University Café	Dinners for trustees	1128	2 75
	E. W Nettleton	Labor	1129	3 00
	Roy Rexroth	"	1130	3 00
	J. C. Mergler	"	1131	4 50
	R. Fitts	"	1132	4 72
	J. D. Uncapher	"	1133	3 03
	T. W. Brinker	"	1134	1 25
	Lewis Meiche	"	1135	6 94
	H. S. Belden	"	1136	5 44
	A. E. Day	"	1137	5 50
	A. H. Snyder	"	1138	2 50
	F. E. Hamilton	"	1139	3 69
	W. H. Gilmore	"	1140	4 94
	W. W. Trowbridge	"	1141	2 13
	R. M. Ruhlen	"	1142	1 13
	O. L. Vanlament	"	1143	7 88
	W. K. Breckenridge	"	1144	5 94
	J. S. Jones	"	1145	2 06
	Edw. Shaw	"	1146	2 50
	F. C. Long	"	1147	3 13
	E. C. Cotton	"	1148	2 44
	J. C. Perry	"	1149	2 50
	W. Atherton	"	1150	2 63
	W. W. Gregory	"	1151	1 19
	J. W. Brookens	"	1152	4 75
	J. R. Greenlee	"	1153	3 56
	A. D. Dickinson Co.	Seed	1154	25 25
	E. C. Kissinger	Cement	1155	1 25
	O. E. Jennings	Labor	1156	2 00
	R. A. McClure	Lumber	1157	9 52
	A. F. Wilcox	Labor	1158	32 40
	I. L. Eno	"	1159	2 50
	Kauffman Lattimer Co.	Apparatus and for lab. sup.	1160	1,370 65
	F. W. Prentiss	B-E. for ac. Max Koehler & M	1161	369 81
	Cent. Ohio Paper Co.	Paper	1162	4 20
	F. W. Prentiss	B-E. ac. Carl Schleicher & S	1163	150 08
	Baker & Co.	Crucibles	1164	11 20
	J. Carbutt	Photo Plates	1165	12 48

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Nov. 5	Kimball & Matthews..	Photo Plates.....	1166	47 45
	Green, Joyce & Co....	Towels	1167	22 50
	Seeds & Mills.....	Feed	1168	103 50
	Schreiber & Sons.....	Lantern slides.....	1169	1 00
	Saunders & Esswein...	Coat hooks	1170	11 25
	E. C. Livenspire.....	Smithing	1171	8 25
	Kemp & Burpee.....	Repairs	1172	1 25
	F. S. Johnston.....	Clerical work	1173	13 95
	J. F. Cunningham.....	Postage	1174	2 00
	Spahr & Glenn.....	Stationery	1175	2 75
	J. R. Cain.....	Labor	1176	1 38
	W. H. Peters.....	" and lumber	1177	2 50
	F. M. Bownocker.....	"	1178	4 19
	R. J. Palmer.....	"	1179	5 31
	K. Nurian	"	1180	2 00
	C. T. Pfaff & Co.....	Glassware	1181	1 15
	Cambridge Bot. Sp. Co.	Labels	1182	1 04
	Haydenv'le M. & M. Co	Clay	1183	3 00
	Baker Mfg. Co.....	Machine parts	1184	22 50
	Jno. McAllister	Labor	1185	19 50
	Hager & Graves.....	Groceries	1186	63
	Prosch Mfg. Co.....	Repairs	1187	5 00
	M. Staley	Labor	1188	8 07
	F. C. Caldwell.....	Cash for book-case	1189	7 00
	C. E. Lee.....	Labor	1190	1 38
	S. T. Hallsman.....	Painting	1191	21 00
	Krauss, Butler & B. Co.	Laboratory fixtures	1192	7 20
	F. B. Potts.....	Labor	1193	1 50
	Pancoast Vent. Co....	Ventilators	1194	4 00
	Stitt, Price & Co.....	Cement	1195	14 50
	McClelland & Co.....	Blackboard	1196	17 20
	A. D. Morely.....	Carpentry	1197	4 50
	Norton Emery Whl, Co	Emery wheels	1198	4 14
	Nicholson File Co....	File cards	1199	45 89
	Jones & Laughlin.....	Iron	1200	5 26
	Morse Tw't D. & M. Co	Wrench	1201	2 85
	E. B. Schulte Sons Co.	Iron and steel.....	1202	50 68
	Col. Bolt Works.....	Bolts	1203	8 71
	S. C. Derby.....	Cash adv. for books.....	1204	5 85
	Gowing & Co.....	Calorimeters	1205	32 00
	Crescent Steel Co.....	Steel	1206	2 34
	L. S. Starrett & Co....	Cutter	1207	2 48
	A. F. Hall.....	Cash adv. for sundries	1208	55
	M. P. Streett.....	Masonry	1209	5 00
	Hoggson & P. Mfg. Co.	Steel stamps	1210	72
	W. H. Miller Co.....	Glass and hdwe	1211	33 94
	Simons Hdw. Co.....	"	1212	1 33
	Geo. Trowbridge	Carpentry	1213	25
	E. H. Bailey.....	Labor	1214	4 05
	F. J. Hale.....	Clerical work	1215	3 00
	H. Judd	Carpentry	1216	7 88
	Holmes F. Grap. M. Co	Hangers	1217	18 29
	W. B. Calkins.....	Labor	1218	13 50
	Knv Sheerer Co.....	Scientific instruments	1219	80 35
	S. L. Huddleson.....	Running track	1220	130 00
	C. P. Linhart.....	Blacksmithing	1221	2 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Nov. 5	J. & G. Butler	Soap	1222	8 00
	A. G. Spalding & Bros.	Gym. equipment	1223	869 80
	Bancroft & Bros.	Elect. instruments	1224	7 00
	Western Elec. Co.	" "	1225	88 70
	Thomas Law Book Co.	Labels	1226	6 25
	H. J. Hammond	Hosp. supplies	1227	2 81
	W. Sparhawk	Laundry	1228	53
	Sparhawk & Worcester	Care of horse	1229	25 00
	D. C. Beggs	Shades	1230	6 25
	Ohio Furn. Co.	Boxes	1231	45 00
	R. C. Osburn	Collecting	1232	3 60
	A. H. Smythe	Paper	1233	1 50
	Brehnne & Stengele	Cork	1234	12 00
	W. T. Falconer Mf. Co	Apiarian supplies	1235	3 00
	H. L. Osborn	Books	1236	16 93
	Cherington P. & E. Co.	Self-inker	1237	1 25
	Ward's Nat. Sci. Est.	Mounting	1238	140 00
	Murray City Coal Co.	Coal	1239	661 74
	Engelke & Bigelow	Freight and drayage	1240	73 00
	C. Woodruff	Carpentry and climb. flag pole	1241	65 00
	Wilbert Morlan	Carpentry	1242	5 40
	H. C. Nidy	Labor	1243	5 19
	R. J. Seymour	"	1244	8 75
	B. B. Wells	"	1245	4 80
	E. G. Bailey	"	1246	5 00
	W. Erdmann	"	1247	15 98
	Mrs. E. R. Hubler	Clerical work	1248	14 17
	Franklin Toil. Sup. Co.	Laundry	1249	17 97
	J. H. Randall	Carpentry	1250	38 75
	J. H. Nold	Labor	1251	8 80
	Elliott & Maclean	Molding, etc	1252	10 83
	Blackwood, G. & Co.	Hardware	1253	37 34
	Col. Supply Co.	" supplies	1254	43 47
	Col. Rubber & B. Co.	Hose and coupling	1255	82 28
	Kelton & Converse	Lumber	1256	159 40
	Champlin Ptg. Co.	Printing	1257	109 60
	Tallmadge Hdw. Co.	Hdwe	1258	45 35
	Standard Oil Co.	Oil	1259	30 25
	Library Bureau	Library supplies	1260	20 19
	Nitschke Bros	Stationery	1261	14 35
	G. E. Stechert	Books	1262	112 43
	J. A. Erner & Co.	Elect. supplies	1263	6 64
	R. W. Bock	Sign painting	1264	15 00
	B. D. Potts	Hose and pipes	1265	5 22
	New Col. Bdg. Co.	Iron	1266	24 00
	Col. Gas Co.	Coke	1267	19 25
	Cap. City Mch. Wks.	Hdwe	1268	4 95
	Schoedinger, F. & Co.	"	1269	11 81
	Perry Smythe	Picture frames	1270	13 95
	J. P. Carlile	Cement	1271	5 17
	Hann & Adair	Printing	1272	30 48
	H. Braun Sons & Co.	Surgical instruments	1273	56 43
	Bausch L. Opt. Co.	Microscopes	1274	345 40
	Ruggles Gale Co.	Office supplies	1275	14 33
	G. M. Johnson	Refund of fees	1276	5 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Nov. 5	R. W. Funk	Work in store-room	1277	27 38
	Paul Jones	Postage and letter book	1278	3 70
	Col. Gas Co.	Gas	1279	123 97
8	C. F. Bowen	Refund of fees	1280	6 75
	Lily Weeks	Salary as janitrix	1281	5 00
11	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.	1282	4 00
	C. F. Sigrist	Fees refunded	1283	4 50
12	F. W. Prentiss	Payment bonds and int.	1284	28,375 00
	G. Bruder	Salary band master	1285	42 00
17	F. W. Prentiss	B-E. ac. C Kob & Co.	1286	807 75
22	Lily Weeks	Salary to Nov 21 1898.	1287	10 00
	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.	1288	8 00
26	J. H. Canfield	Salary Nov, 1898	1289	500 00
	Alexis Cope	" "	1290	187 50
	C. E. Barnet	" "	1291	65 00
	F. W. Prentiss	" "	1292	33 33
	Jean Blackford	" "	1293	54 17
	E. D. Cockins	" "	1294	58 33
	T. F. Hunt	Salary Nov., 1898, inst.	1295	250 00
	W. F. Hunter	" " "	1296	250 00
	G. W. Knight	" " "	1297	250 00
	W. A. Kellerman	" " "	1298	225 00
	Wm. McPherson	" " "	1299	225 00
	C. N. Brown	" " "	1300	225 00
	A. C. Barrows	" " "	1301	225 00
	Edw. Orton	" " "	1302	225 00
	E. A. Eggers	" " "	1303	225 00
	J. R. Smith	" " "	1304	225 00
	H. A. Weber	" " "	1305	225 00
	W. R. Lazenby	" " "	1306	225 00
	F. E. Sanborn	" " "	1307	225 00
	S. C. Derby	" " "	1308	225 00
	A. M. Bleile	" " "	1309	225 00
	R. D. Bohannan	" " "	1310	225 00
	W. T. Magruder	" " "	1311	225 00
	J. P. Gordy	" " "	1312	225 00
	W. H. Scott	" " "	1313	225 00
	B. F. Thomas	" " "	1314	225 00
	J. V. Denney	" " "	1315	225 00
	B. L. Bowen	" " "	1316	225 00
	H. Osborn	" " "	1317	225 00
	N. W. Lord	" " "	1318	200 00
	F. A. Ray	" " "	1319	200 00
	G. B. Kauffman	" " "	1320	200 00
	Edw. Orton, Jr.	" " "	1321	180 00
	J. N. Bradford	" " "	1322	180 00
	G. W. McCoard	" " "	1323	160 00
	C. P. Linhart	" " "	1324	160 00
	H. C. Lord	" " "	1325	160 00
	E. A. Hitchcock	" " "	1326	150 00
	D. S. White	" " "	1327	150 00
	W. D. Gibbs	" " "	1328	140 00
	P. G. Bowman	" " "	1329	140 00
	F. C. Caldwell	" " "	1330	140 00
	F. C. Clark	" " "	1331	135 00
	W. H. Page	" " "	1332	135 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Nov. 26	S. A. Norton.....	Salary Nov., 1898, inst	1333	120 00
	R. I. Fulton.....	" "	1334	120 00
	W. H. Siebert.....	" "	1335	120 00
	O. B. Jones.....	" "	1336	120 00
	J. E. Boyd.....	" "	1337	120 00
	E. B. Kinkead.....	" "	1338	110 00
	J. R. Taylor.....	" "	1339	110 00
	C. E. Sherman.....	" "	1340	100 00
	T. E. French.....	" "	1341	100 00
	C. W. Mesloh.....	" "	1342	100 00
	C. L. Arnold.....	" "	1343	100 00
	K. D. Swartzel.....	" "	1344	100 00
	A. W. Hodgman.....	" "	1345	100 00
	W. A. Knight.....	" "	1346	95 00
	C. W. Weick.....	" "	1347	95 00
	C. C. Sleffel.....	" "	1348	95 00
	J. H. Schaffner.....	" "	1349	90 00
	C. W. Foulk.....	" "	1350	90 00
	J. A. Bownocker.....	" "	1351	90 00
	C. A. Dye.....	" "	1352	90 00
	W. L. Graves.....	" "	1353	90 00
	J. S. Hine.....	" "	1354	85 00
	F. L. Landacre.....	" "	1355	85 00
	A. E. Vinson.....	" "	1356	80 00
	E. M. Van Harlingen..	" "	1357	80 00
	M. P. Brush.....	" "	1358	80 00
	C. Wissler	" "	1359	80 00
	S. M. Elliott.....	" "	1360	75 00
	E. O. Randall.....	" "	1361	70 00
	D. F. Pugh.....	" "	1362	70 00
	E. E. Harrold.....	" "	1363	70 00
	N. H. Brown.....	" "	1364	70 00
	E. E. Somermier.....	" "	1365	65 00
	F. H. Ruhlen.....	" "	1366	60 00
	T. K. Lewis.....	" "	1367	60 00
	A. F. Hall.....	" "	1368	60 00
	W. F. Lavery.....	" "	1369	60 00
	C. B. Frederick.....	" "	1370	60 00
	H. Townshend	" "	1371	55 00
	J. F. Cunningham.....	" "	1372	54 00
	G. S. Kellicott.....	" "	1373	50 00
	M. D. Jeffrey.....	" "	1374	50 00
	A. V. Bleininger.....	" "	1375	40 00
	Lucy Allen	" "	1376	40 00
	M. Dresbach	" "	1377	30 00
	F. A. Fish.....	" "	1378	30 00
	A. H. McIntire.....	" "	1379	30 00
	E. L. Ball.....	" "	1380	30 00
	S. E. Rasor.....	" "	1381	30 00
	H. Judd	" "	1382	30 00
	F. J. Hale.....	" "	1383	30 00
	J. B. Parker.....	" "	1384	30 00
	B. F. Maag.....	" "	1385	30 00
	J. H. Vosskuehler.....	" "	1386	30 00
	E. L. Fullmer.....	" "	1387	25 00
	R. Fischer	" "	1388	25 00

STATEMENT II — Continued.

Date.	To whom paid.	For wnat purpose.	No.	Amount.
1898.				
Nov. 26	F. O. Clements.....	Salary Nov., 1898, inst	1389	25 00
	O. V. Brumley.....	" "	1390	20 00
	R. C. Purdy.....	" "	1391	20 00
	G. W. Rightmire.....	" "	1392	20 00
	E. H. Bailey.....	" "	1393	15 00
	F. F. D. Albery.....	" "	1394	15 00
	J. H. Collins.....	" "	1395	10 00
	D. A. Kohr.....	" "	1396	10 00
	R. E. McIntosh.....	" "	1397	10 00
	H. Gamper	" "	1398	7 50
	W. C. McCracken.....	" "	1399	150 00
	Geo. Rose	" "	1400	65 00
	C. Low	" "	1401	54 17
	W. Standley	" "	1402	50 00
	B. Lebay	" "	1403	50 00
	Thos. Boude.....	" "	1404	45 00
	W. H. Case.....	" "	1405	45 00
	H. Martz	" "	1406	45 00
	M. Peck	" "	1407	40 00
	F. K. Luke.....	" "	1408	40 00
	A. Chantler	" "	1409	40 00
	J. F. Longman.....	" "	1410	40 00
	J. H. Brown.....	" "	1411	40 00
	D. D. Geren.....	" "	1412	40 00
	W. Whitestine	" "	1413	40 00
	H. Chantler	" "	1414	40 00
	Geo. Denney	" "	1415	40 00
	M. N. Cook.....	" "	1416	40 00
	T. L. Edgington.....	" "	1417	40 00
	T. E. Osborn.....	" "	1418	40 00
	Jas. Kelley	" "	1419	35 00
	D. C. Huddleson.....	" "	1420	50 00
	W. C. Mills.	" "	1421	25 00
	Mrs. E. R. Hubler....	" "	1422	20 00
	Wash. Townsend	" "	1423	25 00
	W. C. Weir.....	" "	1424	20 00
	J. C. Perry.....	" "	1425	12 50
	G. W. Elwell.....	" "	1426	40 00
	A. G. McCall.....	" "	1427	20 00
25	M. W. Sherwood.....	Refund of fees, soldier....	1428	9 00
26	Joe Garretson	Plumbers' helper	1429	37 50
28	W. S. Haly.....	Refund of fees.....	1430	5 00
	C. H. Evans.....	" soldier	1431	12 00
Dec. 1	F. W. Prentiss.....	Paymt of int. bonds.....	1432	5,700 00
	A. A. H. Grimm.....	Refund of fees, slodier....	1433	5 00
3	Kate Shanaham	Inst. in laundrying.....	1434	26 00
6	Lily Weeks	Salary as janitrix	1435	8 00
	L. B. Wing.....	Expenses meet'g trustees...	1436	9 55
7	M. J. Kellenberger....	Serv\| dept. dom. sci.....	1437	8 00
10	Col. Gas Co.....	Gas	1438	139 12
	F. R. West.....	Guide and mess. serv.....	1439	2 00
	M. Snow	" "	1440	5 12
	J. F. Travis.....	" "	1441	1 75
	F. C. McKinney.....	" "	1442	4 75
	V. Martz	" "	1443	3 75
	R. J. Seymour.....	" "	1444	5 87

STATEMENT II — Continued.

Date.	To whom paid.	For what pnrpose.	No.	Amount.
1898.				
Nov. 26	F. J. Pavlicek	Guide and mess. serv	1445	4 12
	Tracy Wells Co	Mops	1446	15 60
	Cherington P. & E. Co.	Rubber stamp	1447	50
	Cent. O. Oil Co	Oil	1448	12 60
	Buckeye H. & L. Co	Leather	1449	35
	Webb. Sta. & Ptg. Co.	Stationery	1450	18 00
	Hanna Paint Mfg. Co.	Paint	1451	1 50
	Lawrence Press Co	Vouchers	1452	1 50
	Mrs. E. R. Hubler	Clerical work	1453	7 82
	Ideal Pub. Co	Half-tone cut	1454	1 50
	West. U. Tel. Co	Telegraph service	1455	63
	A. McLaughlin	Work in record office	1456	1 28
	Mrs. F. D. Meyer	Laundry	1457	3 00
	E. R. Calloway	Cleaning vaults	1458	67 53
	Burgess Sold. Fur. Co.	Repairs	1459	1 95
	Bourne & K. Mfg. Co.	Gaskets	1460	2 78
	Sherwood Mfg. Co	Cutters	1461	2 00
	Col. Brass Co	Labor and material	1462	2 40
	Shawmut F. Wire Co.	Fuses	1463	61
	J. J. Gheen	Plastering	1464	15 85
	Waters Governor Co.	Reducing valve	1465	140 00
	Jewell Belting Co	Sundries	1466	13 03
	Kilbourne Jones Co	Bolts	1467	45
	Pneumatic Eng. Co	Pump	1468	250 00
	West Steam Eng. Co.	Packing	1469	35 00
	Eaton Mch. Wks	Labor and material	1470	10 50
	West'ghouse E. Mf. Co.	Apparatus	1471	186 17
	M. P. Streett	Building chimney	1472	11 65
	M. L. Blose	Labor	1473	5 88
	R. E. McIntosh	"	1474	6 91
	F. A. Fish	"	1475	3 00
	H. C. Nidy	"	1476	5 55
	C. R. Stauffer	"	1474	1 60
	J. T. Frankenberg	"	1478	3 28
	M. C. Hunter	"	1479	10 40
	M. Stanley	"	1480	6 75
	C. Pixler	" clean boilers	1481	41 25
	Jas. Stainbrook	" "	1482	40 50
	J. LeBay	Digging trench	1483	6 75
	Jeffrey Hdw. Co	Sprocket and chain	1484	29 35
	General Elec. Co	Elect. supplies	1485	6 25
	The Lantern	Advertising	1486	60 00
	Y. M. C. A	"	1487	5 50
	Boston Book Co	Books	1488	132 80
	Seraphim B. Book Co.	Binding	1489	55 65
	Ginn & Co	Books	1490	2 25
	Torrey Bot. Club	Bulletin	1491	20
	Am. Jo. of Physiology	Books	1492	5 00
	I. N Demmon	"	1493	30 00
	Am. Trot. Reg. Assn.	"	1494	3 00
	Good Housekeeping	Magazine	1495	27
	E. A. Werner	Books	1496	5 00
	Univ. of Chic. Press	Magazine	1497	40
	Writer Pub. Co	"	1498	2 00
	Cambridge Ent. Club.	"	1499	2 00
	Helman Taylor Co	Books	1500	27 10

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 10	G. E. Steckert	Books	1501	86 54
	Burrows Bros. Co.	"	1502	223 12
	O. S. Lear	Typewriter	1503	75 00
	Yawman & E. Mfg. Co.	Library supplies	1504	5 18
	Boston Bk. Binding Co.	Binders	1505	2 00
	Agr. Stud. Pub. Co.	Adv	1506	10 00
	L. T. Williams	Work in library	1507	10 00
	B. Hermann	"	1508	2 10
	H. B. Farnham	"	1509	2 00
	Fritch Mfg. Co.	Iron work	1510	17 50
	H. Haerlein	Landscape gardening	1511	66 10
	Col. Macadam Co.	Stone screenings	1512	208 73
	L. Meiche	Labor	1513	1 75
	W. Atherton	"	1514	1 87
	J. Mergler	"	1515	1 00
	J. B. Crabb	"	1516	2 00
	W. K. Breckenridge	"	1517	5 13
	H. L. Belden	"	1518	5 37
	W. H. Gilmore	"	1519	1 44
	O. L. Vandament	"	1520	2 25
	J. D. Uncapher	"	1521	1 87
	A. F. Wilcox	"	1522	13 43
	J. A. Brookens	"	1523	4 75
	T. McOwen	"	1524	1 75
	C. Mooney	"	1525	1 80
	O. E. Jennings	"	1526	2 31
	A. H. Snyder	"	1527	1 94
	J. Keller	Gravel	1528	339 52
	Eastman Kodak Co.	Photo plates	1529	11 20
	Kauffman Lattimer Co.	Apparatus and chemicals	1530	239 85
	Baker & A. Chem. Co.	Chemicals	1531	12 60
	Creamery Pkg. Co.	Pulp caps	1532	5 00
	W. Burdell, Jr.	Harness	1533	1 75
	B. W. Herman	Freight	1534	4 40
	Stitt, Price & Co.	Lime	1535	1 68
	Cyclone W. Wire F. Co	Fence	1536	67 81
	H. P. Miller	Sheep and lectures	1537	20 00
	Seeds & Mills	Oil meal	1538	2 80
	Mrs. C. H. Woodruff	Lodging hands	1539	5 25
	Press Post Ptg. Co.	Advertising	1540	1 79
	Col. Dispatch	"	1541	2 70
	O. S. Journal Co.	"	1542	2 52
	J. Immel & Son	Repairing	1543	9 20
	J. Weisheimer	Grinding	1544	8 85
	C. M. Cott	Milk tickets	1545	4 50
	H. A. Blakester	"	1546	15 00
	E. C. Livenspire	Blacksmithing	1547	9 95
	G. W. Clarke & Co.	Lumber	1548	59 16
	M. J. Bergin Lbr. Co.	"	1549	17 64
	Coe & Spencer	"	1550	3 20
	F. S. Johnston	Clerical work	1551	13 80
	Kny Sheerer Co.	Model of eye	1552	19 00
	Richards & Co.	Chemicals	1553	3 55
	E. C. Duke	Clearing field	1554	1 77
	M. G. Modie	Wire	1555	3 07
	Bausch L. Opt. Co.	Balsam	1556	86

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 10	L. C. Riddle	Mounting plants	1557	9 00
	M. Peck	Specimens	1558	8 00
	Bradstreets Co	Journal	1559	182 00
	Jas. Penn	Freight and drayage	1560	1 37
	Payne McD. Hdw. Co.	Hardware	1561	1 25
	J. M. Blair	Packing and draying	1562	2 50
	Moonstone Cpy. Sl. Co.	Ink and filling	1563	1 95
	Mayer Pottery Co	Pottery supplies	1564	3 00
	Col. Brass Co	Boiler and motor	1565	30 25
	Alphea Dairy Co	Milk tickets	1566	2 00
	Z. L. White & Co	Dry goods	1567	14 00
	F. C. Clark	Office supplies	1568	2 65
	H. Geren	"	1569	1 15
	Macmillan Co	Book	1570	75
	J. Hertner	Labor	1571	7 35
	McClelland & Co	Books	1572	27 60
	Hammond & Sparh'k.	Care of horse	1573	10 25
	H. Troemner	Scales	1574	88 98
	E. A. Kinsey Co	Steel	1575	3 26
	Morse T. Drill & M. Co	Taps	1576	3 01
	Hager & Graves	Molasses	1577	60
	P. Hayden S. Hdw. Co	Copper	1578	5 22
	Haydenv'le M. & M. Co	Coke	1579	11 36
	B. B. Wells	Labor	1580	12 00
	K. Nurian	"	1581	7 05
	J. H. Nold	"	1582	7 95
	G. M. Berndroth	"	1583	3 45
	H. Gamper	"	1584	4 28
	E. Thompson Co	Encyclopædia of law	1585	6 00
	Ohio Furn. Co	Book-case	1586	16 00
	J. M. Hayden & Co	Lacing	1587	3 30
	L. S. Starrett Co	Tools	1588	9 25
	Armstrong Brs. T. Co.	"	1589	7 43
	Direct Separator Co	Separator	1590	12 00
	J. DeRycke	"	1591	16 00
	Western Mfg Co	Tools	1592	2 63
	Buffalo Scale Co	Scale parts	1593	28 17
	Schaffer & Budenberg.	Counter	1594	16 00
	Wheeler C. & Eng. Co.	Condenser	1595	400 00
	F. J. Hale	Labor	1596	2 22
	G. C. Henning	Repairs	1597	75
	McGraw & Andrews	Braces	1598	25
	H. Judd	Carpentry	1599	9 12
	E. H. Bailey	Pipe fitting	1600	10 65
	Taylor M. & G. Co	Interior wk. and furn	1601	221 00
	Miller Furn. Co	Chairs	1602	56 50
	Baker's Art Gallery	Frame and pictures	1603	22 40
	H. Goldsmith	Musical inst. and repairs	1604	49 80
	R. W. Funk	Labor	1605	6 52
	L. S. Brown & Son	Repairs	1606	60
	L. S. Huddleson	Running track	1607	18 30
	J. C. Sherwood	Basket ball	1608	4 50
	D. C. Beggs Co	Shades	1609	4 50
	Queen & Co	Scales	1610	12 00
	West. Elec. Co	Wattmeters	1611	30 00
	Col. Buggy Co	Painting	1612	6 50

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 10	C. Scribner's Sons....	Book	1613	1 25
	I. N. Demmon.....	"	1614	25 00
	E. Kaiser.....	Salt	1615	1 10
	M. A. Frazar.....	Netting	1616	2 10
	R. C. Osborn.....	Work in library	1617	8 85
	E. G. Bailey.....	Labor	1618	4 96
	J. A. Erner & Co.....	Elect. supplies	1619	24 65
	Blackwood, G. & Co...	Hardware	1620	35 35
	Elliott & Maclean.....	Lumber	1621	27 40
	J. H. Randall.....	Carpentry	1622	56 50
	W. Morelan	"	1623	12 60
	Tallmadge Hdw Co...	Hardware	1624	22 88
	Col. Rubber & B. Co..	Pipe	1625	11 62
	Palmer & Beck.....	Roofing	1626	67 07
	Krauss, B. & B. Co...	Shades	1627	34 40
	W. H. Anderson & Co.	Books	1638	272 25
	Hann & Adair.....	Typewriter, paper, etc.....	1629	114 75
	Kelton & Converse....	Lumber	1630	17 42
	J. M. & W. Westwater.	Sundries	1631	5 75
	Fkl. Toilet Sup. Co...	Laundry	1632	34 05
	Green, Joyce & Co....	Dry goods	1633	12 26
	Nitschke Bros.....	Paper and ink	1634	6 00
	Champlin Ptg. Co....	Printing, etc.....	1635	136 00
	H. Braun Sons Co....	Chemicals	1636	5 68
	B. D. Potts	Hardware	1637	37 39
	Library Bureau	Book-case and supplies	1638	44 80
	Schoedinger, F. & Co..	Hardware	1639	7 58
	Kimball & Matthews..	Photo supplies	1640	8 97
	T H McAllister.....	Stereopticon supplies	1641	11 03
	Standard Oil Co.....	Oil	1642	42 46
	Col. Supply Co.....	Hardware supplies	1643	27 35
	Jas. Ohlen Sons.....	Steel	1644	5 45
	Cap. City Mch. Wks..	Machine parts	1645	69 26
	W Erdman	Labor	1646	10 90
	Murray City Coal Co..	Coal	1647	987 68
	C. H. Woodruff.....	Labor and material	1648	61 25
	Engelke & Bigelow....	Freight and cartage.....	1649	57 08
12	R. M. Rownd, P. M...	Stamps	1650	20 00
	Lily Weeks	Salary Dec. 5–12, 1898.....	1651	5 00
14	W. I. Chamberlain....	Exp. del. L. G. Col. Ass'n..	1652	22 78
	W. I. Chamberlain....	Exp. meet'g Dec. 14, 1898..	1653	16 15
15	T. J. Godfrey.....	" " ..	1654	27 95
16	J. McL. Smith.....	" " ..	1655	7 95
	J. T. Mack.....	" " ..	1656	13 85
17	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.....	1657	12 00
16	R. M. Rownd, P. M...	Postage	1658	21 80
	Lily Weeks	Salary Dec. 12–19	1659	5 00
17	D. S. White.....	" 1898, inst.....	1660	150 00
21	J. H. Canfield.....	" "	1661	500 00
	Alexis Cope	" "	1662	187 50
	C. E. Barnet.....	" "	1663	65 00
	F. W. Prentiss.....	" "	1664	33 33
	Jean Blackford	" "	1665	54 17
	E. D. Cockins.....	" "	1666	58 33
	T. F. Hunt.....	" "	1667	250 00
	W. F. Hunter.....	" "	1668	250 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 21	G. W. Knight.....	Salary Dec., 1898, inst.....	1669	250 00
	W. A. Kellerman.....	" "	1670	225 00
	W. McPherson	" "	1671	225 00
	C. N. Brown.....	" "	1672	225 00
	A. C. Barrows.....	" "	1673	225 00
	Edw. Orton	" "	1674	225 00
	E. A. Eggers.....	" "	1675	225 00
	J. R. Smith.....	" "	1676	225 00
	H. A. Weber.....	" "	1677	225 00
	W. R. Lazenby.....	" "	1678	225 00
	F. E. Sanborn.....	" "	1679	225 00
	S. C. Derby.....	" "	1680	225 00
	A. M. Bleile.....	" "	1681	225 00
	R. D. Bohannan.....	" "	1682	225 00
	W. T. Magruder.....	" "	1683	225 00
	J. P. Gordy.....	" "	1684	225 00
	W. H. Scott.....	" "	1685	225 00
	B. F. Thomas.....	" "	1686	225 00
	J. V. Denney.....	" "	1687	225 00
	B. L. Bowen.....	" "	1688	225 00
	H. Osborn	" "	1689	225 00
	N. W. Lord.....	" "	1690	200 00
	F. A. Ray.....	" "	1690	200 00
	G. B. Kauffman.....	" "	1692	200 00
	Edw. Orton, Jr.....	" "	1693	180 00
	J. N. Bradford.....	" "	1694	180 00
	G. W. McCoard.....	" "	1695	160 00
	C. P. Linhart.....	" "	1696	160 00
	H. C. Lord.....	" "	1697	160 00
	E. A. Hitchcock.....	" "	1698	150 00
	W. D. Gibbs.....	" "	1699	140 00
	P. G. Bowman.....	" "	1700	140 00
	F. C. Caldwell.....	" "	1701	140 00
	F. C. Clark.....	" "	1702	135 00
	W. H. Page.....	" "	1703	135 00
	S. A. Norton.....	" "	1704	120 00
	R. I. Fulton.....	" "	1705	120 00
	W. H. Siebert.....	" "	1706	120 00
	O. B. Jones.....	" "	1707	120 00
	J. E. Boyd.....	" "	1708	120 00
	E. B. Kinkead.....	" "	1709	110 00
	J. R. Taylor.....	" "	1710	110 00
	C. E. Sherman.....	" "	1711	100 00
	T. E. French.....	" "	1712	100 00
	C. W. Mesloh.....	" "	1713	100 00
	C. L. Arnold.....	" "	1714	100 00
	K. D. Swartzel.....	" "	1715	100 00
	A. W. Hodgman.....	" "	1716	100 00
	W. A. Knight.....	" "	1717	95 00
	C. W. Weick.....	" "	1718	95 00
	C. C. Sleffel.....	" "	1719	95 00
	J. H. Schaffner.....	" "	1720	90 00
	C. W. Foulk.....	" "	1721	90 00
	J. A. Bownocker.....	" "	1722	90 00
	C. A. Dye.....	" "	1723	90 00
	W. L. Graves.....	" "	1724	90 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 21	J. S. Hine	Salary Dec., 1898, inst	1725	85 00
	F. L. Landacre	" "	1726	85 00
	A. E. Vinson	" "	1727	80 00
	E. M. Van Harlingen	" "	1728	80 00
	M. P. Brush	" "	1729	80 00
	C. Wissler	" "	1730	80 00
	S. M. Elliott	" "	1731	75 00
	E. O. Randall	" "	1732	70 00
	D. F. Pugh	" "	1733	70 00
	E. E. Harrold	" "	1734	70 00
	N. H. Brown	" "	1735	70 00
	E. E. Somermeier	" "	1736	65 00
	F. Ruhlen	" "	1737	60 00
	T. K. Lewis	" "	1738	60 00
	A. F. Hall	" "	1739	60 00
	W. F. Lavery	" "	1740	60 00
	C. B. Fredericks	" "	1741	60 00
	Harriet Townsend	" "	1742	55 00
	J. F. Cunningham	" "	1743	54 00
	G. S. Kellicott	" "	1744	50 00
	M. D. Jeffrey	" "	1745	50 00
	A. V. Bleininger	" "	1746	40 00
	Lucy Allen	" "	1747	40 00
	M. Dresbach	" "	1748	30 00
	F. A. Fish	" "	1749	30 00
	A. H. McIntyre	" "	1750	30 00
	E. L. Ball	" "	1751	30 00
	S. E. Rasor	" "	1752	30 00
	Horace Judd	" "	1753	30 00
	F. J. Hale	" "	1754	30 00
	J. B. Parker	" "	1755	30 00
	B. F. Maag	" "	1756	30 00
	J. H. Vosskuehler	" "	1757	30 00
	E. L. Fullmer	" "	1758	25 00
	Robt. Fischer	" "	1759	25 00
	F. O. Clements	" "	1760	25 00
	O. V. Brumley	" "	1761	20 00
	R. C. Purdy	" "	1762	20 00
	G. W. Rightmire	" "	1763	20 00
	E. H. Bailey	" "	1764	15 00
	F. F. D. Albery	" "	1765	15 00
	J. H. Collins	" "	1766	10 00
	D. A. Kohr	" "	1767	10 00
	R. E. McIntosh	" "	1768	10 00
	C. Guittard	" "	1769	50 00
	H. Gamper	" "	1770	7 50
	W. C. McCracken	" "	1771	150 00
	G. Rose	" "	1772	65 00
	Chas. Low	" "	1773	54 17
	Wm. Standley	" "	1774	50 00
	B. LeBay	" "	1775	50 00
	Thos. Boude	" "	1776	45 00
	W. H. Case	" "	1777	45 00
	H. Martz	" "	1778	45 00
	M. Peck	" "	1779	40 00
	T. K. Luke	" "	1780	40 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1898.				
Dec. 21	A. Chantler	Salary Dec., 1898	1781	40 00
	J. F. Longman	Salary Dec. 24, 1898	1782	30 97
	J. H. Brown	Salary Dec., 1898	1783	40 00
	D. D. Geren	" "	1784	40 00
	W. Whitestine	" "	1785	40 00
	H. Chantler	" "	1786	40 00
	G. C. Denny	" "	1787	40 00
	M. N. Cook	" "	1788	40 00
	T. S. Edgington	" "	1789	40 00
	T. E. Osborn	" "	1790	40 00
	J. Kelley	" "	1791	35 00
	D. C. Huddleson	" "	1792	50 00
	W. C. Mills	" "	1793	25 00
	Mrs. E. R. Hubler	" "	1794	20 00
	W. Townsel	" "	1795	25 00
	W. C. Weir	" "	1796	20 00
	J. C. Perry	" "	1797	12 50
	G. W. Elwell	" "	1798	40 00
	A. G. McCall	" "	1799	20 00
	C. B. Enlow	Quartermaster's fees	1800	5 00
	Joe. Garrettson	27d helper to plumber, $1.50	1801	40 50
28	D. M. Massie	Expenses as trustee	1802	39 32
1899.				
Jan. 3	R. M. Rownd, P. M.	Stamped envelopes	1803	85 60
	L. B. Wing	Expenses meetings	1804	9 75
4	R. C. Purdy	Fees for cer. scholarship	1805	6 50
5	L. H. Potter	Fees retd on ac. enlistment	1806	6 50
6	Col. Gas Co	Gas	1807	135 90
7	F. F. Pavlicek	Guide and mess. serv	1808	2 50
	R. J. Seymour	" "	1809	4 87
	F. C. McKinney	" "	1810	2 62
	F. R. West	" "	1811	2 65
	M. Snow	" "	1812	2 62
	Ind. Alkali Wks	Savogran	1813	18 53
	Mrs. E. R. Hubler	Clerical work	1814	12 80
	Am. Dist. Tel. Co	Watch box rent	1815	27 00
	Cherington P. & E. Co.	Rubber stamp	1816	25
	Mitchell Adv. Co	Time card	1817	1 00
	Krauss, Butler & B. Co.	Rug and shades	1818	51 85
	Pfeifer & Boeshans	O. S. Journal	1819	73
	Cent. Ohio Paper Co.	Paper	1820	19 00
	D. H. Derflinger	Gasoline	1821	4 34
	J. N. McDonald	Plastering	1821	19 00
	Sherwood Mfg. Co	Cutters	1823	3 00
	Jas. Stainbrook	Cleaning boilers	1824	10 25
	W. Morelan	Carpentry	1825	1 60
	Babcock & Wilcox Co.	Nuts, bolts, etc	1826	68 48
	Col. Rubber & B. Co.	Hdwe supplies	1827	26 60
	J. S. Abbott & Co	Hdwe	1828	2 65
	Elliott & Maclean	Lumber	1829	18 75
	Murphy Iron Wks	Castings	1830	8 00
	B. D. Potts	Hdwe	1831	4 35
	C. Pixler	Cleaning boilers	1832	43 50
	Jeffrey Mfg. Co	Castings	1833	30 76
	Stitt, Price & Co	Cement	1834	6 50
	O. T. Corson	Advertising	1835	15 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Jan. 7	W. D. Hoard Co.....	Advertising.....	1836	13 44
	W. S. Wiggins.....	Rubber stamps	1837	45
	Macmillan & Co.....	Bulletins	1838	1 00
	T. C. Trueblood.....	Copy of report	1839	1 00
	Lemcke & Buechner..	Books	1840	11 60
	Geol. Soc. of Am.....	"	1841	5 00
	Seraphim B. Book Co.	Binding	1842	41 65
	Burrows Bros. Book Co	Books	1843	94 34
	University Café	Meals for trustees	1844	1 75
	H. L. Belden.....	Labor	1845	1 13
	A. F. Wilcox.....	"	1846	15 30
	E. Greiner	Apparatus	1847	2 50
	Denver F. Clay Co....	Crucibles, etc.....	1848	35 05
	Kimball & Mathews...	Photo supplies	1849	3 47
	Kauffman Lattimer Co.	Chemicals and apparatus...	1850	94 79
	Seeds & Mills.....	Feed	1851	142 50
	S. T. Hallsman.....	Painting	1852	2 80
	Col. Buggy Co.....	Repairs	1853	2 00
	Barber Mfg. Co.....	Enamel	1854	2 10
	Burrell & Co.....	Dairy supplies	1855	14 92
	Diamond C. Salt Co...	Salt	1856	2 25
	Creamery Pkg. Co....	Dairy supplies	1857	21 90
	F. B. Fargo & Co.....	" "	1858	13 00
	L. Hoster Brew. Co...	Sprouts	1859	6 64
	J. Immel & Son.....	Repairs	1860	4 85
	H. H. Klott.....	"	1861	8 50
	Bausch & L. Opt. Co..	Apparatus	1862	18 98
	Richards & Co.....	Ferrometer	1863	36 00
	W. J. Davidson.....	Mdse	1864	1 00
	Eimer & Amend.....	Muenke apparatus	1865	18 75
	Golding & Sons Co....	Pebbles	1866	6 10
	Fish Press. Brick Co..	Lime and cement	1867	7 40
	McClelland & Co.....	Blank book	1868	60
	J. McAllister	Labor	1869	22 50
	W. Carman	"	1870	7 50
	L. E. Barringer.....	"	1871	4 72
	C. P. Linville.....	"	1872	2 13
	F. Jeffrey	"	1873	8 10
	F. O. Clement.....	Clerical work	1874	3 75
	Keuffel & Esser.....	Apparatus	1875	6 50
	J. Bien & Co.....	Maps	1876	7 75
	A. C. Armstrong & Son	Book	1877	1 35
	Jas. Penn	Drayage	1878	70
	Col. Ice Co.....	Ice	1879	1 10
	Hagar & Graves.....	Groceries	1880	20 09
	W. I. Saunders.....	Papering and painting	1881	48 50
	Elec. Appliance Co....	Elect supplies	1882	6 63
	J. A. Erner & Co.....	"	1883	14 08
	Sipe & Sigler.....	"	1884	8 07
	Weston Elec. Inst. Co.	"	1885	2 00
	C. T. Phillips.....	Paper	1886	16 78
	W. H. Anderson & Co.	Book	1887	3 50
	Lunkenheimer Co....	Regrinding valves	1888	8 68
	J. Ohlen & Sons.....	Steel	1889	75
	Crosby St. G. & V. Co.	3 way cocks	1890	10 05
	Cherington P. & E. Co.	Rubber stamp	1891	75

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Jan. 7	Holmes F. & G Mf. Co.	Bushings	1892	2 09
	E. G. Bailey	Labor	1893	38
	E. H. Bailey	"	1894	2 55
	H. Judd	Carpentry	1895	2 25
	M. P. Streett	Smoke stack	1896	178 80
	T. H. McAllister	Photo supplies	1897	27 53
	Chic. L. Sup. & S. Co.	Balance	1898	1 50
	A. Spittal	Falling shutter	1899	14 70
	J. M. & W. Westwater.	Elect supplies	1900	2 00
	West. Elec. Co.	Physical apparatus	1901	14 40
	W. Burdell, Jr.	Blankets	1902	10 00
	Hammond & Sparh'k.	Vet. hosp. supplies	1903	11 06
	R. C. Osborn	Work in museum	1904	7 20
	Kny Sheerer Co.	Insect pins	1905	14 40
	Murray City Coal Co.	Coal	1906	1,110 19
	Engelke & Bigelow.	Freight and drayage	1907	35 94
	C. H. Woodruff	Labor and cash adv.	1908	60 50
	F. S. Johnston	Clerical work	1909	17 55
	Tallmadge Hdw. Co.	Hdwe	1910	22 43
	Blackwood G. & Co.	"	1911	49 01
	H. Braun Sons & Co.	Drugs and surg. instrum'ts.	1912	24 67
	G. E. Stechert	Books	1913	271 80
	J. H. Randall	Carpentry	1914	21 50
	Kelton & Converse.	Lumber	1915	21 49
	Champlin Ptg. Co.	Printing	1916	49 10
	P. Hayden S. Hdw. Co.	Hdwe	1917	71 15
	Cap. City Mch. Wks.	"	1918	61 10
	Nitschke Bros	Stationery	1919	11 75
	H. Cole	Tracing cloth	1920	11 75
	Franklin Toil. Sup. Co.	Laundry	1921	4 20
	Col. Supply Co.	Hdwe	1922	39 87
	Spahr & Glenn	Stationery	1923	11 25
	Standard Oil Co.	Oil	1924	10 48
	Hann & Adair	Printing and paper	1925	29 80
	Lily Weeks	Salary Jan. 3–6 inc.	1926	4 00
	G. A. Goodspeed	Salary Dec. 25 to Dec. 31.	1927	9 03
17	Lily Weeks	" Jan. 9–16	1928	5 00
	M. J. Kellenberger.	3 weeks' work dept. dom. econ	1929	15 00
19	Col. Rubber & B. Co.	Tubing and valve	1930	6 20
28	J. H. Canfield	Salary Jan., 1899, inst.	1931	500 00
	Alexis Cope	" "	1932	187 50
	C. E. Barnet	" "	1933	65 00
	Jean Blackford	" "	1934	54 17
	E. D. Cockins	" "	1935	58 33
	F. W. Prentiss	" "	1936	33 33
	W. F. Hunter	" "	1937	250 00
	T. F. Hunt	" "	1938	250 00
	G. W. Knight	" "	1939	250 00
	W. A. Kellerman	" "	1940	225 00
	W. McPherson	" "	1941	225 00
	C. N. Brown	" "	1942	225 00
	A. C. Barrows	" "	1943	225 00
	Edw. Orton	" "	1944	225 00
	E. A. Eggers	" "	1945	225 00
	J. R. Smith	" "	1946	225 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Jan. 28	H. A. Weber	Salary Jan., 1899, inst.	1947	225 00
	W. R. Lazenby	" "	1948	225 00
	F. E. Sanborn	" "	1949	225 00
	S. C. Derby	" "	1950	225 00
	A. M. Bleile	" "	1951	225 00
	R. D. Bohannan	" "	1952	225 00
	W. T. Magruder	" "	1953	225 00
	J. P. Gordy	" "	1954	225 00
	W. H. Scott	" "	1955	225 00
	B. F. Thomas	" "	1956	225 00
	J. V. Denney	" "	1957	225 00
	B. L. Bowen	" "	1958	225 00
	H. Osborn	" "	1959	225 00
	N. W. Lord	" "	1960	200 00
	F. A. Ray	" "	1961	200 00
	G. B. Kauffman	" "	1962	200 00
	Edw. Orton, Jr.	" "	1963	180 00
	J. N. Bradford	" "	1964	180 00
	H. J. Noyes	" "	1965	166 66
	G. W. McCoard	" "	1966	160 00
	C. P. Linhart	" "	1967	160 00
	H. C. Lord	" "	1968	160 00
	E. A. Hitchcock	" "	1969	150 00
	D. S. White	" "	1970	150 00
	W. D. Gibbs	" "	1971	140 00
	P. G. Bowman	" "	1972	140 00
	F. C. Caldwell	" "	1973	140 00
	F. C. Clark	" "	1974	135 00
	W. H. Page	" "	1975	135 00
	S. A. Norton	" "	1976	120 00
	R. I. Fulton	" "	1977	120 00
	W. H. Siebert	" "	1978	120 00
	O. B. Jones	" "	1979	120 00
	J. E. Boyd	" "	1980	120 00
	E. B. Kinkead	" "	1981	110 00
	J. R. Taylor	" "	1982	110 00
	C. E. Sherman	" "	1983	100 00
	T. E. French	" "	1984	100 00
	C. W. Mesloh	" "	1985	100 00
	C. L. Arnold	" "	1986	100 00
	K. D. Swartzel	" "	1987	100 00
	A. W. Hodgman	" "	1988	100 00
	W. A. Knight	" "	1989	95 00
	C. W. Weick	" "	1990	95 00
	F. W. Smyser	" "	1991	80 00
	J. H. Schaffner	" "	1992	90 00
	C. W. Foulk	" "	1993	90 00
	J. A. Bownocker	" "	1994	90 00
	C. A. Dye	" "	1995	90 00
	W. L. Graves	" "	1996	90 00
	J. S. Hine	" "	1997	85 00
	F. L. Landacre	" "	1998	85 00
	A. E. Vinson	" "	1999	80 00
	E. M. Van Harlingen	" "	2000	80 00
	M. P. Brush	" "	2001	80 00
	C. Wissler	" "	2002	80 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Jan. 28	S. S. James	Salary Jan., 1899, inst.	2003	80 00
	Stella Elliott	" "	2004	75 00
	E. O. Randall	" "	2005	70 00
	D. F. Pugh	" "	2006	70 00
	E. E. Harrold	" "	2007	70 00
	N. H. Brown	" "	2008	70 00
	E. E. Somermeier	" "	2009	65 00
	F. Ruhlen	" "	2010	60 00
	T. K. Lewis	" "	2011	60 00
	A. F. Hall	" "	2012	60 00
	W. F. Lavery	" "	2013	60 00
	C. B. Frederick	" "	2014	60 00
	H. Townshend	" "	2015	55 00
	J. F. Cunningham	" "	2016	54 00
	G. S. Kellicott	" "	2017	50 00
	M. D. Jeffrey	" "	2018	50 00
	A. V. Bleininger	" "	2019	40 00
	L. Allen	" "	2020	40 00
	M. Dresbach	" "	2021	30 00
	F. A. Fish	" "	2022	30 00
	A. H. McIntire	" "	2023	30 00
	E. L. Ball	" "	2024	30 00
	S. E. Rasor	" "	2025	30 00
	H. Judd	" "	2026	30 00
	F. J. Hale	" "	2027	30 00
	J. B. Parker	" "	2028	30 00
	B. F. Maag	" "	2029	30 00
	J. H. Vosskuehler	" "	2030	30 00
	E. L. Fullmer	" "	2031	25 00
	R. Fischer	" "	2032	25 00
	F. O. Clements	" "	2033	25 00
	O. V. Brumley	" "	2034	20 00
	R. C. Purdy	" "	2035	20 00
	G. W. Rightmire	" "	2036	20 00
	E. H. Bailey	" "	2037	15 00
	F. F. D. Albery	" "	2038	15 00
	J. H. Collins	" "	2039	10 00
	D. A. Kohr	" "	2040	10 00
	R. E. McIntosh	" "	2041	10 00
	C. B. Guittard	" "	2042	50 00
	H. Gamper	" "	2043	7 50
	W. C. McCracken	" "	2044	150 00
	Geo. Rose	" "	2045	65 00
	Chas. Low	" "	2046	54 17
	W. Standley	" "	2047	50 00
	B. LeBay	" "	2048	50 00
	T. Boude	" "	2049	45 00
	W. H. Case	" "	2050	45 00
	H. Martz	" "	2051	45 00
	M. Peck	" "	2052	40 00
	T. K. Lewis	" "	2053	40 00
	A. Chantler	" "	2054	40 00
	G. A. Goodspeed	" "	2055	40 00
	J. H. Brown	" "	2056	40 00
	D. D. Geren	" "	2057	40 00
	W. Whitestine	" "	2058	40 00

STATEMENT II — Continued

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Jan. 28	H. Chantler	Salary Jan., 1899, inst	2059	40 00
	G. C. Denny	" "	2060	40 00
	M. N. Cook	" "	2061	40 00
	T. S. Edgington	" "	2062	40 00
	T. E. Osborn	" "	2063	40 00
	J. Kelley	" "	2064	35 00
	D. C. Huddleson	" "	2065	50 00
	W. C. Mills	" "	2066	25 00
	Mrs. E. R. Hubler	" "	2067	20 00
	Wash. Townsell	" "	2068	25 00
	W. C. Wier	" "	2069	20 00
	J. C. Perry	" "	2070	12 50
	G. W. Elwell	" "	2071	40 00
	A. G. McCall	" "	2072	20 00
	J. Covan	" "	2073	44 03
	J. Garretson	" "	2074	30 00
23	L. Weeks	Salary Jan. 16–23	2075	5 00
31	Col. Gas Co	Gas	2076	118 80
	L. Weeks	Salary Jan. 23–31	2077	7 00
Feb. 1	Mrs. M. J. Kellenberger	Serv. dept. dom. sci	2078	10 00
	W. I. Chamberlain	Expense meet. Jan. 31, 1899	2079	14 95
2	R. M. Rownd, P. M.	Postage stamps	2080	41 00
8	C. Pixler	Salary as helper	2081	10 50
7	J. McL. Smith	Expenses meet. Jan 31, Feb. 1	2082	6 40
10	Paul Jones	Expenses as trustee	2083	1 25
14	Lily Weeks	Salary Feb. 6–13	2084	5 00
16	Mrs. M. J. Kellenberger	Serv. dept. dom. sci	2085	10 00
	J. F. Mack	Expenses as trustee	2086	13 60
20	W. K. Morehead	Archæological coll	2087	300 00
25	J. H. Canfield	Salary Feb., 1899, inst	2088	500 00
	Alexis Cope	" "	2089	187 50
	C. E. Barnet	" "	2090	65 00
	F. W. Prentiss	" "	2091	33 33
	Jean Blackford	" "	2092	54 17
	E. D. Cockins	" "	2093	58 33
	T. F. Hunt	" "	2094	250 00
	W. F. Hunter	" "	2095	250 00
	G. W. Knight	" "	2096	250 00
	W. A. Kellerman	" "	2097	225 00
	W. McPherson	" "	2098	225 00
	C. N. Brown	" "	2099	225 00
	A. C. Barrows	" "	2100	225 00
	Edw. Orton, Sr	" "	2101	225 00
	E. A. Eggers	" "	2102	225 00
	J. R. Smith	" "	2103	225 00
	H. A. Weber	" "	2104	225 00
	W. R. Lazenby	" "	2105	225 00
	F. E. Sanborn	" "	2106	225 00
	S. C. Derby	" "	2107	225 00
	A. M. Bleile	" "	2108	225 00
	R. D. Bohannan	" "	2109	225 00
	W. T. Magruder	" "	2110	225 00
	J. P. Gordy	" "	2111	225 00
	W. H. Scott	" "	2112	225 00
	B. F. Thomas	" "	2113	225 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Feb. 2	J. V. Denney	Salary Feb., 1899, inst	2114	225 00
	B. L. Bowen	" "	2115	225 00
	H. Osborn	" "	2116	225 00
	N. W. Lord	" "	2117	200 00
	F. A. Ray	" "	2118	200 00
	G. B. Kauffman	" "	2119	200 00
	Edw. Orton, Jr.	" "	2120	180 00
	J. N. Bradford	" "	2121	180 00
	H. J. Noyes	" "	2122	166 67
	G. W. McCoard	" "	2123	160 00
	C. P. Linhart	" "	2124	160 00
	H. C. Lord	" "	2125	160 00
	E. A. Hitchcock	" "	2126	150 00
	D. S. White	" "	2127	150 00
	W. D. Gibbs	" "	2128	140 00
	P. G. Bowman	" "	2129	140 00
	F. C. Caldwell	" "	2130	140 00
	F. C. Clark	" "	2130	135 00
	W. H. Page	" "	2132	135 00
	S. A. Norton	" "	2133	120 00
	R. I. Fulton	" "	2134	120 00
	W. H. Siebert	" "	2135	120 00
	O. B. Jones	" "	2136	120 00
	J. E. Boyd	" "	2137	120 00
	E. B. Kinkead	" "	2138	110 00
	J. R. Taylor	" "	2139	110 00
	C. E. Sherman	" "	2140	100 00
	T. E. French	" "	2141	100 00
	C. W. Mesloh	" "	2142	100 00
	C. L. Arnold	" "	2143	100 00
	K. D. Swartzel	" "	2144	100 00
	A. W. Hodgman	" "	2145	100 00
	W. A. Knight	" "	2146	95 00
	C. W. Weick	" "	2147	95 00
	F. W. Smyser	" "	2148	80 00
	J. H. Schaffner	" "	2149	90 00
	C. W. Foulk	" "	2150	90 00
	J. A. Bownocker	" "	2151	90 00
	C. A. Dye	" "	2152	90 00
	W. L. Graves	" "	2153	90 00
	J. S. Hine	" "	2154	85 00
	F. L. Landacre	" "	2155	85 00
	A. E. Vinson	" "	2156	80 00
	E. M. Van Harlingen	" "	2157	80 00
	M. P. Brush	" "	2158	80 00
	C. Wissler	" "	2159	80 00
	S. S. James	" "	2160	80 00
	S. M. Elliott	" "	2161	75 00
	E. O. Randall	" "	2162	70 00
	D. F. Pugh	" "	2163	70 00
	E. E. Harrold	" "	2164	70 00
	N. H. Brown	" "	2165	70 00
	E. E. Somermeier	" "	2166	65 00
	F. Ruhlen	" "	2167	60 00
	T. K. Lewis	" "	2168	60 00
	A. F. Hall	" "	2169	60 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Am
1899.				
Feb. 25	W. F. Lavery.....	Salary Feb., 1899, inst	2170	
	C. B. Frederick.....	" "	2171	
	H. Townshend	" "	2172	
	J. F. Cunningham.....	" "	2173	
	G. S. Kellicott.....	" "	2174	
	M. D. Jeffrey.....	" "	2175	
	A. V. Bleininger.....	" "	2176	
	Lucy Allen	" "	2177	
	M. Dresbach	" "	2178	
	F. A. Fish.....	" "	2179	
	A. H. McIntire.....	" "	2180	
	E. B. Ball.....	" "	2181	
	S. E. Rasor.....	" "	2182	
	H. Judd	" "	2183	
	F. J. Hale.....	" "	2184	
	J. B. Parker.....	" "	2185	
	B. F. Maag.....	" "	2186	
	J. H. Vosskuehler.....	" "	2187	
	E. L. Fullmer.....	" "	2188	
	R. Fischer	" "	2189	
	F. O. Clements.....	" "	2190	
	O. V. Brumley.....	" "	2191	
	R. C. Purdy.....	" "	2192	
	G. W. Rightmire.....	" "	2193	
	E. H. Bailey.....	" "	2194	
	F. F. D. Albery.....	" "	2195	
	J. H. Collins.....	" "	2196	
	D. A. Kohr.....	" "	2197	
	R. E. McIntosh.....	" "	2198	
	C. B. Guittard.....	" "	2199	
	H. Gamper	" "	2200	
	W. C. McCracken.....	" "	2201	
	Geo. Rose	" "	2202	
	Chas. Low	" "	2203	
	W. Standley	" "	2204	
	B. LeBay	" "	2205	
	T. Boude.....	" "	2206	
	W. H. Case.....	" "	2207	
	H. Martz	" "	2208	
	M. Peck	" "	2209	
	T. K. Lewis.....	" "	2210	
	A. Chantler	" "	2211	
	G. A. Goodspeed.....	" "	2212	
	J. H. Brown.....	" "	2213	
	D. D. Geren.....	" "	2214	
	W. Whitestine	" "	2215	
	H. Chantler	" "	2216	
	G. C. Denny.....	" "	2217	
	M. V. Cook.....	" "	2218	
	T. S. Edgington.....	" "	2219	
	T. E. Osborn.....	" "	2220	
	J. Kelley	" "	2221	
	D. C. Huddleson.....	" "	2222	
	W. C. Mills.....	" "	2223	
	Mrs. E. R. Hubler....	" "	2224	
	Wash. Townsell.....	" "	2225	

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Feb. 25	W. C. Wier	Salary Feb., 1899, inst	2226	20 00
	J. C. Perry	" "	2227	12 50
	G. W. Elwell	" "	2228	40 00
	A. G. McCall	" "	2229	20 00
	J. Garretson	" "	2230	36 00
	J. Covan	" "	2231	65 00
25	Lily Weeks	Salary Feb. 12–30	2232	5 00
21	N. F. Pheneger	Butter fat	2233	113 92
25	T. J. Godfrey	Expenses trustee	2234	20 65
	C. Souther	Salary ½ mo., Feb. 14–28	2235	40 00
	C. H. Woodruff	Salary Jan., 1899	2236	60 00
	C. H. Woodruff	" Feb., 1899	2237	60 00
28	F. R. West	Services as guide	2238	4 87
	M. Snow	" "	2239	2 87
	F. C. Caldwell	" supt	2240	75 00
	R. J. Seymour	" messenger	2241	4 25
	T. C. McKinney	" guide	2242	3 87
	F. J. Pavlicek	" "	2243	2 87
	W. S. Orvis	Office supplies	2244	3 85
	E. O. Vaile	Ohio Directory	2245	1 00
	J. H. Canfield	Cash for sundries	2246	15 00
	Nitschke Bros	Printing	2247	20 60
	Ruggles Gale Co	Cabinet file	2248	2 00
	Hann & Adair	Printing	2249	10 10
	F. O. Schoedinger	Tin boxes	2250	2 00
	M. Armbruster & Sons.	Changing scenery	2251	5 00
	Cherington P. & E. Co.	Dater	2252	50
	Col. Rubber & B. Co.	Waste	2253	14 70
	B. D. Potts	Repairs	2254	25
	Hutton Bros	Painting	2255	1 75
	Standard Oil Co	Oil	2256	39 59
	Col. Supply Co.	Repairs	2257	1 35
	H. Braun Sons & Co.	Oil	2258	1 95
	Mitchell Adv. Co	Depot time card	2259	60
	Cent. U. Tel. Co	Telephone rent	2260	96 75
	Mrs. F. D. Meyers	Laundry	2261	2 00
	Yardley & Harsh	Mop buckets	2262	4 50
	Annis McLaughlin	Extra work	2263	4 65
	J. Penn	Drayage	2264	25
	Am. Dist. Tel. Co	Messenger service	2265	5 30
	Champlin Ptg. Co	Printing	2266	52 10
	Webb Sta. & Ptg. Co.	Record book	2267	2 40
	West. U. Tel. Co	Messages	2268	4 60
	P. Hano	Carbon paper	2269	2 25
	Tracy Well Co	Mops, etc	2270	12 01
	Krauss, B. & B. Co	Shades	2271	9 00
	Hanna Pt. Mfg. Co	Paint	2272	4 60
	Col. Rubber & B. Co.	Hdwe supplies	2273	14 35
	B. D. Potts	"	2274	10 36
	Col. Supply Co	"	2275	12
	Vogelgesang Fur. Co.	Furnace repair	2276	23 70
	Tallmadge Hdw. Co	Glass	2277	2 99
	W. Morelan	Carpentry	2278	40
	J. H. Randall	"	2289	5 25
	Palmer & Beck	Metal roofing	2280	33 17
	General Elec. Co	Regulator	2281	144 00

STATEMENT II — Continued.

Date.	To whom paid.	For wnat purpose.	No.	Amount.
1899.				
Feb. 28	M. L. Blose	Labor	2282	45
	H. C. Nidy	"	2283	6 31
	M. C. Hunter	"	2284	8 77
	R. E. McIntosh	"	2285	17 50
	J. Hertner	"	2286	90
	Eaton Mch. Wks	Forging	2287	1 80
	H. A. Morgan	Screens and shades	2288	10 00
	W. N. Saunders	Papering	2289	37 70
	Cap. City Mch. Wks	Repairing	2290	13 06
	Champlin Ptg. Co	Printing	2291	26 25
	C. F. Sprague	Lantern advertising	2292	10 00
	Lillian Burt	Advertising	2293	15 00
	A. F Wilcox	Labor	2294	6 15
	Library Bureau	Library supplies	2295	3 75
	Am. Soc. of M. Eng	Book	2296	1 25
	D. C. Munro	"	2297	1 00
	Helman F Co	"	2298	28 25
	Kelton & Converse	Lumber	2299	4 24
	J. H. Randall	Carpentry	2300	8 50
	Sheehan & Co	Books	2301	15 75
	O. S. Lear	Carbon paper	2302	40
	Boston Book Co	Magazines	2303	12 00
	Serephim B. B. Co	Books	2304	103 35
	A. H. Smythe	Ink	2305	60
	J. Penn	Draying	2306	1 50
	I. H. Miller	Notarial work	2307	3 20
	Burrows Bros. Co	books	2308	121 09
	G. E. Stechert	"	2309	790 71
	Knauth W. & K	"	2310	9 73
	Wilbert Morelan	Carpentry	2311	2 60
	Miami Powder Co	Charcoal	2312	83
	Chicago Blue Pt. P. Co.	B. P. paper	2313	2 64
	A. E. Foote	Chemicals	2314	12 65
	Kauffman Lattimer Co.	Apparatus and chemicals	2315	141 39
	Green, Joyce & Co	Towels	2316	13 80
	Chic. Lab. S. & S. Co	Apparatus	2317	9 30
	Baker & Co	Platinum	2318	13 71
	Kimball & Mathews	Photo supplies	2319	11 61
	Mallenckrodt Ch. Wks.	Chemicals	2320	57 56
	Franklin Toil. Sup. Co.	Laundry	2321	3 39
	Creamery P. Mfg. Co	Dairy supplies	2322	66 78
	F. S. Johnston	Clerical work	2323	15 90
	J. Boyd	Bottle filler	2324	11 70
	R. A. McClure	Lumber	2325	2 41
	Blackwood, G. & Co	Hdwe	2326	64 56
	Cap. City Mch. Wks	"	2327	5 15
	M. Imes	Lab. assistance	2328	20 00
	O. Erf	"	2329	20 00
	A. H. Reid	Dairy supplies	2330	20 00
	Hoster Brew. Co	Sprouts	2331	11 28
	E. Smith	Lab assistance	2332	20 00
	E. C. Livenspire	Smithing	2333	10 15
	J. Immel & Sons	Repairs	2334	6 35
	Cher. Ptg. & Eng. Co	Labels	2335	3 00
	Col. Gas Co	Irons	2336	1 65
	Col. Supply Co	Hdwe	2337	13 94

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Feb. 28	Barber Mfg. Co.....	Repairs	2338	31 50
	Plain City Creamery..	Milk	2339	163 80
	B. D. Potts.....	Hdwe	2340	8 48
	Burrell & Co.....	Dairy supplies	2341	3 38
	Kelton & Converse....	Lumber	2342	2 90
	M. A. Seed Co.....	Mdse	2343	1 26
	Tallmadge Hdw. Co...	Hdwe	2344	1 04
	Ruggles Gale Co.....	Paper	2345	2 75
	Harvard University ...	Astro. telegrams	2346	9 93
	Chem. Elec. Co.....	Damiels' cells	2347	4 52
	Franklin Toil. Sup. Co.	Laundry	2348	75
	Jo. of Com. & Com. Bu.	Books	2349	3 00
	Colt & Co.....	Opt. lantern	2350	44 15
	H. Cole	Reader	2351	60
	Tallmadge Hdw. Co...	Bolts	2352	10
	J. McAllister	Labor	2353	43 75
	Eagle Hdw. Co.....	Mdse	2354	4 32
	Barber Mfg. Co.....	Hdwe	2355	15 30
	Elliot & Maclean.....	Boxes	2356	10 50
	Haydenv'le M. & M. Co	Brick	2357	8 76
	Col. Gas Co.....	Coke	2358	6 17
	Col. Transfer Co.....	Ft. and dray	2359	1 24
	C. Engelhard	Porcelain tubes	2360	16 50
	W Cannan	Labor	2361	12 50
	Tallmadge Hdw. Co...	Hdwe	2362	1 25
	Col. Gas Co.....	Lights	2363	1 50
	Whitall, Tatem & Co.	Mdse	2364	51 04
	Champlin Ptg. Co.....	Printing	2365	4 10
	Nitschke Bros	Stationery	2366	1 65
	Cap. City Mch. Wks...	Locks	2367	2 00
	S. T. Hallsman.....	Painting	2368	20 00
	C. P. Linville.....	Labor	2369	1 20
	B. D. Potts.....	Hdwe	2370	7 21
	J. M. Barringer.....	Labor	2371	2 55
	Palmer & Beck.....	Galvanized hood	2372	7 00
	W. Morelan	Carpentry	2373	2 20
	Blackwood, G. & Co..	Iron can	2374	3 00
	Col. Coal & Lime Co..	Cement	2375	2 25
	Hann & Adair.....	Printing	2376	4 00
	C. H. Davis	Sewing machine	2377	35 00
	Am. Elec. H. Co.....	Laundry iron	2378	7 50
	Schermerham & Co ...	Demonstration frames	2379	2 00
	Pratt Institute	Pamphlets	2380	2 50
	Bradley, Munk & Co..	Shears	2381	3 00
	Spencer Lens Co.....	Microscope	2382	37 50
	Z. L. White & Co.....	Gingham	2383	1 18
	Hagar & Graves.....	Groceries	2384	24 22
	McClelland & Co.....	Stationery	2385	1 90
	Parisian Cloak Co.....	Dry goods	2386	3 09
	Krauss, B. & B. Co....	Hassocks	2387	84
	P. G. Bowman.....	Cash paid for groceries	2388	2 41
	Dunn, Taft & Co.....	Dry goods	2389	3 98
	Cent. Ohio Paper Co..	Paper	2390	3 65
	Mrs. J. F. James.....	Cash paid for supplies	2391	3 40
	Weisman & Lilley.....	Dry goods	2392	1 76
	Alphea Dairy Co.....	Balance ac.....	2393	1 50

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Am
1899.				
Feb. 28	F. C. Clark	Stationery	2394	
	Tallmadge Hdw. Co.	Hdwe	2395	
	Elec. Appliance Co.	Elect. supplies	2396	
	Nitschke Bros	Stationery	2397	
	Schoedinger, F & Co.	Hdwe	2398	
	West. Elec. Co.	Van de Poele machine	2399	
	Hann & Adair	Stationery	2400	
	Union Mfg. Co.	Chuck	2401	
	J. A. Erner & Co.	Elect. supplies	2402	
	J. P. Carlile	Plaster	2403	
	Drawing Sup. Store.	Draw. supplies	2404	
	Schoedinger, F & Co.	Refrigerator	2405	
	Ohio Tool Co.	Boxwood	2406	
	Blackwood, G. & Co.	Hardware	2407	
	Miller Furn. Co.	Stools	2408	
	Kimbal & Mathews.	Printing frames	2409	
	B. D. Potts	Hdwe	2410	
	J. H. Randall	Carpentry	2411	
	Tallmadge Hdw. Co.	Paint	2412	
	E. Orton	Cash for sundries	2413	
	Jas. Penn	Draying	2414	
	W. N. Saunders	Papering	2415	
	Tallmadge Hdw. Co.	Paint	2416	
	H. Cole	Thermometers	2417	
	J. C. Porterfield	Dynamite	2418	
	Wm. Roberts	Labor	2419	
	W. Morelan	Carpentry	2420	
	J. H. Nold	Labor	2421	
	G. M. Berndroth	"	2422	
	Tallmadge Hdw. Co.	Hdwe	2423	
	A. H. Smythe	Stationery	2424	
	G. B. Schulte Sons Co.	Lumber	2425	
	Kelton & Converse.	"	2426	
	H. Gamper	Labor	2427	
	W. Erdman	"	2428	
	Blackwood, G. & Co.	Hdwe	2429	
	Col. Varnish Co.	Paint	2430	
	P Hayden S. Hdw. Co	Copper	2431	
	Hann & Adair	Painting	2432	
	Drawing Supply Store.	Drawing supplies	2433	
	McClelland & Co.	Neostyle paper	2434	
	H. Cole	B. P. paper	2435	
	Cent. O. Paper Co.	Paper	2436	
	Kilbourne Jones Co.	Hdwe	2437	
	B. B. Wells	Labor	2438	
	S. C. Derby	Cash paid for book	2439	
	Hann & Adair	Printing	2440	
	L. Weeks	Salary to Feb. 27	2441	
	Franklin Toil. Sup. Co.	Laundry	2442	
	C. H. Besly & Co.	Brass tubing	2443	
	Crosby S. G. & V. Co.	Ammonia indicator	2444	
	Shilling Fdy. Co.	Test bars	2445	
	Tallmadge Hdw. Co.	Hdwe	2446	
	J. D. Martin, Jr.	Labor	2447	
	G. G. Leinbaugh	"	2448	
	A. H. Lyon	"	2449	

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
eb. 28	E. G. Bailey	Labor	2450	1 00
	Nitschke Bros	Paper	2451	1 50
	W. T. Magruder	Telegram	2452	69
	E. H. Bailey	Services	2453	13 20
	L. S. Starrett Co	Points	2454	19
	Keasbey & M. Co	Pipe coering	2455	11 86
	Jos. Wilckes	Weighing globe	2456	3 60
	J. A. Erner & Co	Switch	2457	13
	Cap. City Mch. Wks	Castings	2458	69
	Col. Brass Co	"	2459	4 00
	Simmons Hdw Co	Cup points	2460	1 75
	Col. Supply Co	Hdwe supplies	2461	24 42
	R. R. Harkins	Labor	2462	22
	Tallmadge Hdw. Co	Hdwe	2463	2 20
	Blackw'd, Green & Co.	"	2464	36 77
	J. S. Abbott & Co	Glass	2465	96
	Col. Gas Co	Coke	2466	7 60
	Kelton & Converse	Lumber	2467	6 11
	W. Morelan	Carpentry	2468	1 00
	J. H. Randall	"	2469	28 75
	A. D. Morely	"	2470	5 75
	M. P. Streett	Masonry	2471	173 70
	Champlin Ptg. Co	Printing	2472	2 50
	H. Goldsmith	Music	2473	4 25
	Keuffel & Esser Co	Engineering instruments	2474	27 62
	Col. Supply Co	Hdwe supplies	2475	8 26
	W. B. Calkins	Work in store-room	2476	36 90
	R. W. Funk	" "	2477	13 27
	J. H. Randall	Carpentry	2478	6 50
	W. N. Saunders	Painting	2479	1 50
	A. Spittal	Scientific instruments	2480	41 35
	H. Kaiser	Hdwe	2481	1 28
	I. Melling	Baskets	2482	4 50
	J. & G. Butler	Soap	2483	20 00
	J. C. Sherwood	Basket ball	2484	4 50
	G. W Clark & Co	Lumber	2485	6 80
	McClelland & Co	Office supplies	2486	10 27
	Schoedinger, F. & Co.	Hdwe	2487	8 51
	Fkl. Toil. Sup. Co	Laundry	2488	36 61
	C. P. Linhart	Repairs	2489	1 80
	West. Elec. Co	Elect supplies	2490	11 13
	Ziegler Elec. Co	" apparatus	2491	6 39
	J. M. & W. Westwater.	Shakers	2492	7 50
	Library Bureau	Brass tips	2493	7 20
	Miller Furn. Co	Tables	2494	9 00
	H. J. Green	Scientific instruments	2495	48 00
	Wm. Gaertner & Co	Scientific instruments	2496	175 00
	Clev. Mch. & Screw Co.	Steel balls	2497	2 80
	Champlin Ptg. Co	Printing	2498	2 50
	Hammond & Sparh'k.	Feeding stock	2499	30 50
	Col. Wire & I. Wks	Wire guards	2500	10 00
	Reynolds Bros	Repairs	2501	50
	H. Braun Sons & Co.	Museum jars	2502	12 00
	Hann & Adair	Printing	2503	2 40
	Tallmadge Hdw. Co	Hdwe	2504	2 86
	J. S. Hine	Book	2505	2 95

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
Feb. 28	H. Braun Sons & Co...	Drugs and supplies	2506	2 82
	Schoedinger, F. & Co..	Letter scale	2507	2 25
	A. W. Jackson & Son..	Binding	2508	13 05
	F. L. Landacre.....	Specimens	2509	1 50
	Col. Supply Co.....	Hdwe supplies	2510	8 15
	W. N. Saunders.....	Papering	2511	30 39
	Engelke & Bigelow....	Freight and dray.....	2512	38 74
	Murray City Coal Co..	Coal	2513	1,164 44
	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.....	2514	10 00
March 4	W. I. Chamberlain....	Expenses trustee	2515	13 45
6	Col. Gas Co.....	Gas	2516	112 95
	Lily Weeks	Salary to Mar. 3.....	2517	5 00
7	T. J. Godfrey.....	Expenses meeting	2518	9 15
10	F. C. McKinney.....	Guide serv.....	2519	4 87
	F. R. West.....	"	2520	2 12
	M. Snow	"	2521	1 87
	R. J. Seymour.....	"	2522	4 25
	F. J. Pavlicek.....	"	2523	4 25
	E. C. Karshner.....	"	2524	2 00
	Mrs. E. R. Hubler....	Clerical work	2525	5 19
	C. H. Woodruff.....	Draying	2526	2 50
	A. A. Ag. Col. & E. Sta	Membership	2527	10 00
	W. S. Orvis.....	Supplies	2528	3 10
	Quinius & Ridenour..	Files	2529	1 00
	J. M. & W. Westwater.	Lamp burners	2530	75
	Mrs. F. D. Meyers....	Laundry	2531	1 13
	Am. Dist. Tel. Co....	Service	2532	2 10
	C. U. Tel. Co.....	"	2533	4 30
	A. McLaughlin.....	Clerical work	2534	1 95
	H. R. Powell.....	"	2535	4 35
	C. E. Bedwell.....	Fire ins.....	2536	41 25
	Lauterbach & Eilber...	"	2537	27 50
	Bryson, B. & Co.....	"	2538	68 74
	Bancroft & McElroy...	"	2539	27 50
	Masury, Young & Co.	Oil	2540	23 82
	McAllister, M. & Co..	Furniture	2541	20 50
	D. C. Beggs Co.....	Rug and screen	2542	20 00
	Vogelgesang Fur. Co..	Grate	2543	3 20
	C. Pixler	Labor	2544	18 00
	Puntenney, E. & Co...	Piano use	2545	4 00
	H. Goldsmith	Mdse	2546	12 50
	O. S. Journal Co.....	Advertising	2547	20 00
	Zanesville High School	Advertising	2548	10 00
	O. T. Corson.....	"	2549	22 50
	Myers Bros	Printing	2550	3 00
	Yardley & Harsh.....	Waste basket	2551	75
	W. H. Lowdermilk...	Reports	2552	16 00
	O. S. Lear.....	Furniture	2553	12 50
	Writer Pub. Co.....	"The Writer"	2554	15
	Am. Pharm. Assn.....	Books	2555	5 50
	Publishers' Weekly ...	Catalogue	2556	3 50
	Am. Inst. of E. E....	Subscription	2557	5 00
	Burrows Bros. Co.....	Books	2558	42 82
	Century Co	Century	2559	29
	Ginn & Co.....	Book	2560	2 00
	W. H. Siebert.....	"	2561	1 90

STATEMENT II—Continued.

te.	To whom paid.	For what purpose.	No.	Amount.
99.				
1 10	I. Ingram	Work in library	2562	5 40
	H. R. Farnham	"	2563	4 40
	L. T. Wililiams	"	2564	23 00
	G. E. Stechert	Books	2565	340 39
	P. P. Hannon	Clerical work	2566	2 00
	Kauffman Lattimer Co.	Chemicals	2567	69 30
	Glucose S. Ref. Co.	Meal	2568	39 00
	M. Imes	Lab. assistance	2569	20 00
	O. Erf	"	2570	20 00
	E. Smith	"	2571	40 00
	Franklin Toil. Sup. Co.	Laundry	2572	1 75
	F. S. Johnston	Clerical work	2573	13 15
	C. O. Zavitz	Expenses delegate	2574	13 57
	J. F. Cunningham	Sundries	2575	1 40
	M. Mills	Work in museum	2576	11 87
	B. D. Potts	Hdwe	2577	2 72
	Standard Oil Co.	Oil	2578	98
	H. Cole	Paper	2579	1 25
	Col. Gas Co.	Coke	2580	6 89
	Penna. Fuel Co.	Coal	2581	11 28
	E. Orton, Jr.	Clerical work	2582	2 24
	Haydenv'le M. & M. Co	Clay	2583	5 71
	Dundon & Co.	Sawdust	2584	3 00
	J. McAllister	Labor	2585	30 00
	W. Cannan	"	2586	10 00
	L. Fink	Molding	2587	1 92
	Colt. & Co.	Lamp burners	2588	85
	F. Jeffrey	Labor	2589	6 90
	Nitschke Bros.	Printing	2590	9 27
	Elliot & Maclean	Lumber	2591	37 16
	Hager & Graves	Groceries	2592	9 93
	Krauss, B. & B. Co.	Brass rings	2593	1 00
	J. Schermhorn	Scissors	2594	4 15
	Miller Furn. Co.	Furniture	2595	164 75
	W. Morelan	Carpentry	2596	2 80
	S. T. Hallsman	Painting	2597	10 00
	T. K. Lewis	Supplies	2598	5 25
	Thompson & Co.	"	2599	116 06
	E. Doddington & Co.	Furniture	2600	26 00
	Polley & Co.	Books	2601	20 00
	T. H. McAllister	Lantern slides	2602	9 13
	Bausch & L. Opt. Co.	Microscope	2603	14 95
	A. Spittal	Labor	2604	37 33
	General Elec. Co.	Elect. apparatus	2605	76 00
	J. G. Biddle	"	2606	92 55
	Queen & Co.	Scientific apparatus	2607	129 60
	Schoedinger, F. & Co.	Hdwe	2608	8 70
	E. J. Oslar	Specimens	2609	14 50
	R. C. Osburn	Work in museum	2610	8 55
	Spahr & Glenn	Printing	2611	1 75
	Col. Supply Co.	Hdwe supplies	2612	40
	Cent. Ohio Paper Co.	Paper	2613	27 75
	Lincoln Elec. Co.	Disks	2614	31 50
	West'gh'use E. & M. Co	Elect. supplies	2615	95
	R. E. McIntosh	Labor	2616	5 25
	Mansfield T. Cop. Co.	Common segments	2617	10 73

STATEMENT II—Continued

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
March 10	Elec. Appliance Co....	Elect. supplies	2618	16 20
	Blackwood, G. & Co...	Hdwe	2619	3 52
	Morse Tw't D. & M. Co	Drills	2620	21 23
	C. A. Sterlinger & Co.	Tools	2621	20 13
	Wm. Erdman	Labor	2622	20 43
	B. B. Wells.....	"	2623	10 88
	H. Gamper	"	2624	18 83
	J. H. Nold.....	"	2625	1 05
	G. M. Berndroth.....	"	2626	6 40
	Kilbourne Jones Co...	Locks	2627	2 25
	K. Nurian	Labor	2628	12 00
	H. J. Noyes.....	Salary March inst.....	2629	166 67
	L. C. Warden.....	Thermometers	2630	80
	Denning & Co.....	Hdwe	2631	18 90
	Payne McD. Hdw. Co.	"	2632	62 40
	E. Thompson & Co...	Enc. of Law.....	2633	6 00
	F. N. Beebe.....	Iowa Reports	2634	148 50
	Anderson & Co.....	Books	2635	24 00
	Cap. City Mch. Wks..	Hdwe	2636	5 11
	C. E. Barnet.....	Clerical work	2637	12 65
	Dunn, Taft & Co.....	Velvet	2638	1 40
	E. H. Bailey.....	Extra services	2639	7 95
	E. G. Bailey.....	Labor	2640	2 56
	F. J. Hale.....	" and material	2641	12 60
	McClelland & Co.....	Office supplies	2642	4 00
	C. Wissler	Stationery	2643	11 20
	R. W. Funk.....	Labor	2644	13 20
	Keyless Lock Co.....	Lock	2645	1 00
	Heath & Co.....	Books	2646	4 72
	W. F. Lavery.....	Services	2647	21 00
	Murray City Coal Co..	Coal	2648	1,150 03
	Engelke & Bigelow....	Freight and drayage	2649	27 35
	Col. M. & M. Sup. Co.	Hdwe supplies	2650	21 82
	Champlin Ptg. Co.....	Printing	2651	17 10
	Kelton & Converse....	Lumber	2652	54 21
	Tallmadge Hdw. Co...	Hdwe	2653	29 80
	M. C. Hunter.....	Labor	2654	4 73
13	Lily Weeks	Salary March 6–13, 1899...	2655	5 00
14	Lawrence Maxwell	Services Page will case.....	2656	500 00
24	Mrs. M. J. Kellenberger	" dept. dom. sci.....	2657	15 00
25	J. H. Canfield.....	Salary March, 1899, inst...	2658	500 00
	Alexis Cope	" " ...	2659	187 50
	C. E. Barnet.....	" " ...	2660	65 00
	F. W. Prentiss.....	" " ...	2661	33 33
	Jean Blackford	" " ...	2662	54 17
	E. D. Cockins.....	" " ...	2663	58 33
	T. F. Hunt.....	" " ...	2664	250 00
	W. F. Hunter.....	" " ...	2665	250 00
	G. W. Knight.....	" " ...	2666	250 00
	W. A. Kellerman.....	" " ...	2667	225 00
	W. McPherson	" " ...	2668	225 00
	C. N. Brown.....	" " ...	2669	225 00
	A. C. Barrows.....	" " ...	2670	225 00
	Edw. Orton.....	" " ...	2671	225 00
	E. A. Eggers.....	" " ...	2672	225 00
	J. R. Smith.....	" " ...	2673	225 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
March 10	H. A. Weber	Salary March, 1899, inst	2674	225 00
	W. R. Lazenby	" "	2675	225 00
	F. E. Sanborn	" "	2676	225 00
	S. C. Derby	" "	2677	225 00
	A. M. Bleile	" "	2678	225 00
	R. D. Bohannan	" "	2679	225 00
	W. T. Magruder	" "	2680	225 00
	J. P. Gordy	" "	2681	225 00
	W. H. Scott	" "	2682	225 00
	B. F. Brown	" "	2683	225 00
	J. V. Denney	" "	2684	225 00
	B. L. Bowen	" "	2685	225 00
	H. Osborn	" "	2686	225 00
	N. W. Lord	" "	2687	200 00
	F. A. Ray	" "	2688	200 00
	G. B. Kauffman	" "	2689	200 00
	Edw. Orton, Jr	" "	2690	180 00
	J. N. Bradford	" "	2691	180 00
	G. W. McCoard	" "	2692	160 00
	C. P. Linhart	" "	2693	160 00
	H. C. Lord	" "	2694	160 00
	E. A. Hitchcock	" "	2695	150 00
	D. S. White	" "	2696	150 00
	W. D. Gibbs	" "	2697	140 00
	P. G. Bowman	" "	2698	140 00
	F. C. Caldwell	" "	2699	140 00
	F. C. Clark	" "	2700	135 00
	W. H. Page	" "	2701	135 00
	S. A. Norton	" "	2702	120 00
	R. I. Fulton	" "	2703	120 00
	W. H. Siebert	" "	2704	120 00
	O. B. Jones	" "	2705	120 00
	J. E. Boyd	" "	2706	120 00
	E. B. Kinkead	" "	2707	110 00
	J. R. Taylor	" "	2708	110 00
	C. E. Sherman	" "	2709	100 00
	T. E. French	" "	2710	100 00
	C. W. Mesloh	" "	2711	100 00
	C. L. Arnold	" "	2712	100 00
	K. D. Swartzel	" "	2713	100 00
	A. W. Hodgman	" "	2714	100 00
	W. A. Knight	" "	2715	95 00
	C. W. Weick	" "	2716	95 00
	F. W. Smyser	" "	2717	80 00
	J. H. Schaffner	" "	2718	90 00
	C. W. Foulk	" "	2719	90 00
	J. A. Bownocker	" "	2720	90 00
	C. A. Dye	" "	2721	90 00
	W. L. Graves	" "	2722	90 00
	J. S. Hine	" "	2723	85 00
	F. L. Landacre	" "	2724	85 00
	A. E. Vinson	" "	2725	80 00
	E. M. Van Harlinger	" "	2726	80 00
	M. P. Brush	" "	2727	80 00
	C. Wissler	" "	2728	80 00
	C. Souther	" "	2729	80 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
March 25	S. M. Elliott.....	Salary March, 1899, inst ...	2730	75 00
	E. O. Randall.....	" " ...	2731	70 00
	D. F. Pugh.....	" " ...	2732	70 00
	E. E. Harrold.....	" " ...	2733	70 00
	N. H. Brown.....	" " ...	2734	70 00
	E. E. Somermeier.....	" " ...	2735	65 00
	F. Ruhlen	" " ...	2736	60 00
	T. K. Lewis.....	" " ...	2737	60 00
	A. F. Hall.....	" " ...	2738	60 00
	W. F. Lavery.....	" " ...	2739	60 00
	C. B. Frederick.....	" " ...	2740	60 00
	H. Townshend	" " ...	2741	55 00
	J. F. Cunningham.....	" " ...	2742	54 00
	G. S. Kellicott.....	" " ...	2743	50 00
	M. D. Jeffrey.....	" " ...	2744	50 00
	A. V. Bleininger.....	" " ...	2745	40 00
	L. Allen	" " ...	2746	40 00
	M. Dresbach	" " ...	2747	30 00
	F. A. Fish.....	" " ...	2748	30 00
	A. H. McIntire.....	" " ...	2749	30 00
	E. L. Ball.....	" " ...	2750	30 00
	S. E. Rasor.....	" " ...	2751	30 00
	H. Judd	" " ...	2752	30 00
	F. J. Hale.....	" " ...	2753	30 00
	J. B. Parker.....	" " ...	2754	30 00
	B. F. Maag.....	" " ...	2755	30 00
	J. H. Vosskuehler.....	" " ...	2756	30 00
	E. L. Fullmer.....	" " ...	2757	25 00
	R. Fischer	" " ...	2758	25 00
	F. O. Clements.....	" " ...	2759	25 00
	O. V. Brumley.....	" " ...	2760	20 00
	R. C. Purdy.....	" " ...	2761	20 00
	G. W. Rightmire.....	" " ...	2762	20 00
	E. H. Bailey.....	" " ...	2763	15 00
	F. F. D. Albery.....	" " ...	2764	15 00
	J. H. Collins.....	" " ...	2765	10 00
	D. A. Kohr.....	" " ...	2766	10 00
	R. E. McIntosh.....	" " ...	2767	10 00
	C. B. Guittard.....	" " ...	2768	50 00
	H. Gamper	" " ...	2769	7 50
	W. C. McCracken.....	" " ...	2770	150 00
	Geo. Rose	" " ...	2771	65 00
	Chas. Low	" " ...	2772	54 17
	W. Standley	" " ...	2773	50 00
	B. LeBay	" " ...	2774	50 00
	T. Boude	" " ...	2775	45 00
	W. H. Case.....	" " ...	2776	45 00
	H. Martz	" " ...	2777	45 00
	M. Peck	" " ...	2778	40 00
	F. K. Luke.....	" " ...	2779	40 00
	A. Chantler	" " ...	2780	40 00
	G. A. Goodspeed.....	" " ...	2781	40 00
	J. H. Brown.....	" " ...	2782	40 00
	D. D. Geren.....	" " ...	2783	40 00
	W. Whitestine	" " ...	2784	40 00
	H. Chantler	" " ...	2785	40 00

STATEMENT II—Continued.

te.	To whom paid.	For what purpose.	No.	Amount.
99.				
n 25	G. C. Denny	Salary March, 1899, inst	2786	40 00
	M. N. Cook	" "	2787	40 00
	T. S. Edgington	" "	2788	40 00
	T. E. Osborn	" "	2789	40 00
	J. Kelley	" "	2790	35 00
	D. C. Huddleson	" "	2791	50 00
	W. C. Mills	" "	2792	25 00
	Mrs. E. R. Hubler	" "	2793	20 00
	W. Townsel	" "	2794	25 00
	W. C. Wier	" "	2795	20 00
	J. C. Perry	" "	2796	12 50
	G. W. Elwell	" "	2797	40 00
	A. G. McCall	" "	2798	20 00
	J. Garretson	" "	2799	30 00
	J. Covan	" "	2800	65 00
	C. H. Woodruff	" "	2801	60 00
	Lily Weeks	Salary as maid	2802	5 00
	Lily Weeks	" "	2803	5 00
1	R. C. Purdy	Ceramics scholarship	2804	5 00
	F. Graham	Fees refunded ac. war	2805	5 00
n 31	F. H. Burr	" "	2806	6 00
1	R. M. Rownd, P. M.	Postage	2807	10 00
3	Lily Weeks	Salary as maid	2808	3 00
	C. F. Roy	Refund of fees ac. war	2809	7 00
6	T. J. Godfrey	Expenses as trustee	2810	13 05
5	W. I. Chamberlain	" "	2811	19 05
8	F. R. West	Guide	2812	2 00
	F. C. McKinney	"	2813	4 62
	R. J. Seymour	"	2814	2 50
	F. J. Pavlicek	"	2815	3 62
	M. Snow	"	2816	4 00
	Lawrence Press Co.	Printing vouchers	2817	4 00
	Standard Oil Co.	Oil	2818	42 21
	F. O. Schoedinger	Hdwe	2819	90
	Tracy Wells Co.	Brooms, mops, etc	2820	16 55
	Lynas Bros	Candles	2821	1 00
	C. E. Miller	Drawing	2822	2 25
	Laning Ptg. Co.	Subscription	2823	1 00
	Mrs. F. D. Meyers	Laundry	2824	2 33
	Coll. Prests Asso of O.	Membership	2825	3 00
	Geo. T. Johnson	Toilet paper	2826	7 50
	Am. Dist. Tel. Co.	Signal box rent	2827	27 30
	W. E. Whitacre	Clerical work	2828	1 80
	Mich. Brush Co.	Brushes	2829	11 05
	H. Powell	Clerical work	2830	6 45
	Mrs. E. R. Hubler	"	2831	5 02
	Jeffrey Mfg. Co.	Castings	2832	6 00
	Sherwood Mfg. Co.	Cutters	2833	3 00
	Pneumatic W. Chk Co	Repairs, etc	2834	3 10
	Miller Furn. Co.	Furniture	2835	12 80
	Col. Brass Co.	Urinal and tank	2836	15 00
	Col. Coal & Lime Co.	Cement	2837	3 25
	F. Charles	Draying	2838	50
	M. P. Streett	Masonry	2839	13 20
	The Lantern	Advertising	2840	60 00
	C. H. Evans & Co.	"	2841	5 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
April 8	Agr. Student Pub. Co.	Advertising	2842	40 00
	Penn. Fuel Co.	Coal	2843	37 88
	I. Ingram	Clerical work	2844	11 63
	R. C. Vance	"	2845	5 00
	B. F. Yates	"	2846	5 00
	P. P. Hammon	"	2847	2 00
	Spahr & Glenn	Cards	2848	2 25
	McAllister, M. & Co.	Desk	2849	25 00
	E. S. Werner	Magazine	2850	1 00
	Pub. Weekly	Index	2851	3 50
	E. S. Field	Library supplies	2852	19 90
	Burnham A. B. Store	Class records	2853	15 00
	Library Bureau	Library supplies	2854	8 50
	W. F. Draper	Books	2855	10 00
	Am. Assn. for Adv. sci	Magazines	2856	2 50
	Am. Elec. Directory	Directories	2857	5 00
	Boston Test Labr.	Periodicals	2858	6 00
	L. Williams	Attendance at library	2859	9 05
	Jas. Penn	Carting	2860	2 80
	Seraphim B. Book Co.	Binding	2861	84 55
	C. F. Milligan	Books	2862	40 00
	Kauffman Lattimer Co.	Chemicals and apparatus	2863	87 25
	Watertown Therm. Co.	Chem. thermometer	2864	4 50
	Baker & A. Chem. Co.	Chemicals	2865	2 45
	Mallmekrodt Ch. Wks.	Chem. and apparatus	2866	27 81
	E. Greiner	Apparatus	2867	10 75
	J. Carbutt	Photo supplies	2868	127 61
	Eimer & Amend	Apparatus	2869	1 35
	Richards & Co.	"	2870	31 23
	F. C. Long	Work in museum	2871	3 00
	F. S. Johnston	Clerical work	2872	14 10
	O. Erf	Lab. work	2873	20 00
	E. B. Meyrowitz	Microscope slides	2874	4 59
	E. M. Van Harlingen	Cash advanced	2875	22 55
	J. McAllister	Labor	2876	24 00
	Wm. Cannan	"	2877	12 13
	Col. Gas Co.	Gas and coke	2878	175 78
	J. H. Nold	Work	2879	4 75
	Kelton & Converse	Lumber	2880	3 60
	Keuffel & Esser	Drawing instruments	2881	80 89
	B. D. Potts	Hdwe	2882	6 79
	F. & R. Lazarus & Co.	Boots	2883	3 75
	Col. E. Elec. Lt. Co.	Elect. work	2884	2 00
	Payne McD. Hdw. Co.	Hdwe	2885	12 31
	Nitschke Bros	Stationery and printing	2886	7 50
	Am. Grocery Co.	Groceries	2887	9 72
	C. H. Davis	Sewing machine	2888	38 50
	A. Dobbie	Dry goods	2889	11 71
	Bausch & L. Opt. Co.	Lens, shutter, etc.	2890	40 57
	E. Doddington & Co.	Lumber	2891	47 78
	R. M. Rownd, P. M.	Postage	2892	31 00
	C. H. Woodruff	Cash advanced	2893	1 25
	S. T. Hallsman	Painting	2894	12 00
	J. S. Abbott & Co.	Hardware	2895	14 78
	Kimball & Mathews	Photo supplies	2896	32 60
	Burross Bros. Co.	Books	2897	188 02

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
April 8	C. E. Thorne	Bees	2898	10 00
	S. R. Moore	B. B. bushes	2899	1 50
	W. Erdman	Labor	2900	16 63
	G. M. Berndroth	"	2901	2 00
	A. H. Lynn	"	2902	3 05
	B. B. Wells	"	2903	6 38
	Morse T. Dr. & M. Co.	Taps	2904	1 09
	W. F. Hunter	Cash advanced	2905	3 50
	Cap. City Mch. Wks.	Hdwe	2906	20 80
	Col. Mill & M. S. Co.	Valves	2907	3 68
	Col. Supply Co.	Hdwe	2908	25 19
	Blackwood, G & Co.	"	2909	22 70
	J. S. Bushnell	Reducing wheel	2910	11 50
	Shilling Fdy. Co.	Castings	2911	76
	Kilbourne J. Mfg. Co.	Lumber	2912	3 85
	Brown & S. Mfg. Co.	Gear model	2913	50 00
	F. J. Hale	Extra services	2914	4 40
	E. H. Bailey	"	2915	3 15
	H. Judd	"	2916	1 75
	E. G. Bailey	Helping in laboratory	2917	4 44
	H. R. Worthington	Ammonia meter	2918	21 25
	Duval Met. Pkg. Co.	Packing	2919	4 84
	C. M. Giddings	Dynamometer	2920	45 00
	Lumkenheimer Co.	Regrinding valves	2921	14 92
	Crane Co	Valve and bushing	2922	4 66
	H. J. Green	Scientific instruments	2923	55 00
	Weston Elec. Inst. Co.	Elect. "	2924	261 00
	E. G. Smith	Scientific instruments	2925	27 46
	J. G. Biddle	Thompson lamp	2926	27 00
	Queen & Co.	Elect. cell	2927	27 50
	A. Spittal	Labor	2928	68 50
	Tallmadge Hdw. Co.	Hdwe	2929	20 03
	McClelland & Co.	Stationery	2930	49 75
	J. McL. Smith	Expenses trustee	2931	11 25
	Braun Sons & Co.	Surg. instr.	2932	2 70
	Franklin Toil. Sup. Co.	Laundry	2933	41 53
	L. S. Wells	Books	2934	1 62
	Harper & Bros.	Book	2935	65
	Perry Smythe	Picture frames	2936	1 55
	Terry Eng. Co.	Etchings	2937	5 52
	Heath & Co.	Books	2938	7 20
	Schoedinger, F. & Co.	Hdwe	2939	36 16
	R. M. Rownd, P. M.	Postage	2940	10 00
	Champlin, Ptg. Co.	Printing	2941	24 00
	W. Morelan	Carpentry	2942	2 60
	Barber Mfg. Co.	Changing refrigerator	2943	64 24
	Murray C. Coal Co.	Coal	2944	953 79
	Engelke & Bigelow	Freight and hauling	2945	26 26
	C. P. Harris	Oratorical contest expenses.	2946	25 00
10	Lily Weeks	Salary as maid	2947	5 00
	R. M. Rownd, P. M.	Postage deposit	2948	25 00
12	Col. Water Works	Water rents and charges	2949	533 83
	J. T. Mack	Expenses trustee	2950	24 70
	H. Gamper	Services as janitor	2951	3 75
14	W. I. Chamberlain	Expenses trustee	2952	13 85
	D. K. Watson	Exp. Morrill mem. address.	2953	40 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
April 15	W. E. Henry.....	Bagging and hauling books.	2954	4 8(
	West. U. Tel. Co.....	Teleg. service	2955	6 3
	T. J. Burrill.....	Expenses Morrill mem. ad.	2956	21 6(
	F. W. Prentiss.....	B-E. for F. L. Dames... ..	2957	11 2
	F. W. Prentiss.....	B-E. for C. A. Kahlbaum..	2958	8 7
	F. C. Clark.....	Cash adv for postage	2959	1 1
	H. Graham	Refund fees ac. war.....	2960	4 5(
17	Lily Weeks	Salary as maid	2961	5 0(
	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.....	2962	20 0(
22	F. C. Clark.....	Cash advanced	2963	3 7
	F. C. Caldwell.....	Supt. elect. plant.....	2964	100 0(
24	Lily Weeks	Salary as maid	2965	5 0(
29	J. H. Canfield.....	Salary April, 1899, inst....	2966	500 0(
	Alexis Cope	" " "	2967	187 5(
	C. E. Barnet.....	" " "	2968	65 0(
	F. W. Prentiss.....	" " "	2969	33 3
	Jean Blackford	" " "	2970	54 1
	E. D. Cockins.....	" " "	2971	58 3
	T. F. Hunt.....	" " "	2972	250 0(
	W. A. Kellerman.....	" " "	2973	225 0(
	W. McPherson	" " "	2974	225 0(
	C. N. Brown.....	" " "	2975	225 0(
	A. C. Barrows.....	" " "	2976	225 0(
	Edw. Orton, Sr.....	" " "	2977	225 0(
	E. A. Eggers.....	" " "	2978	225 0(
	J. R. Smith.....	" " "	2979	225 0(
	H. A. Weber.....	" " "	2980	225 0(
	W. R. Lazenby.....	" " "	2981	225 0(
	S. C. Derby.....	" " "	2982	225 0(
	A. M. Bleile.....	" " "	2983	225 0(
	R. D. Bohannan.....	" " "	2984	225 0(
	W. T. Magruder.....	" " "	2985	225 0(
	J. P. Gordy.....	" " "	2986	225 0(
	W. H. Scott.....	" " "	2987	225 0(
	B. F. Thomas.....	" " "	2988	225 0(
	J. V. Denney.....	" " "	2989	225 0(
	B. L. Bowen.....	" " "	2990	225 0(
	H. Osborn	" " "	2991	225 0(
	N. W. Lord.....	" " "	2992	200 0(
	F. A. Ray.....	" " "	2993	200 0(
	G. B. Kauffman.....	" " "	2994	200 0(
	Edw. Orton, Jr.....	" " "	2995	180 0(
	J. N. Bradford.....	" " "	2996	180 0(
	G. W. McCoard.....	" " "	2997	160 0(
	C. P. Linhart.....	" " "	2998	160 0(
	H. C. Lord.....	" " "	2999	160 0(
	E. A. Hitchcock.....	" " "	3000	150 0(
	D. S. White.....	" " "	3001	150 0(
	W. D. Gibbs.....	" " "	3002	140 0(
	P. G. Bowman.....	" " "	3003	140 0(
	F. C. Caldwell.....	" " "	3004	140 0(
	F. C. Clark.....	" " "	3005	135 0(
	W. H. Page.....	" " "	3006	135 0(
	S. A. Norton.....	" " "	3007	120 0(
	R. I. Fulton.....	" " "	3008	120 0(
	W. H. Siebert.....	" " "	3009	120 0(

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
April 29	O. B. Jones.....	Salary April, 1899, inst....	3010	120 00
	J. E. Boyd.....	" "	3011	120 00
	E. B. Kinkead.....	" "	3012	110 00
	J. R. Taylor.....	" "	3013	110 00
	C. E. Sherman.....	" "	3015	100 00
	T. E. French.....	" "	3015	100 00
	C. W. Mesloh.....	" "	3016	100 00
	C. L. Arnold.....	" "	3017	100 00
	K. D. Swartzel.....	" "	3018	100 00
	A. W. Hodgman.....	" "	3019	100 00
	W. A. Knight.....	" "	3020	95 00
	C. W. Weick.....	" "	3021	95 00
	F. W. Smyser.....	" "	3022	80 00
	J. H. Schaffner.....	" "	3023	90 00
	C. W. Foulk.....	" "	3024	90 00
	J. A. Bownocker.....	" "	3025	90 00
	C. A. Dye.....	" "	3026	90 00
	W. L. Graves.....	" "	3027	90 00
	J. S. Hine.....	" "	3028	85 00
	F. L. Landacre.....	" "	3029	85 00
	A. E. Vinson.....	" "	3030	80 00
	E. M. Van Harlingen.	" "	3031	80 00
	M. P. Brush.....	" "	3032	80 00
	C. Wissler	" "	3033	80 00
	C. Souther	" "	3034	80 00
	S. M. Elliott.....	" "	3035	75 00
	E. O. Randall.....	" "	3036	70 00
	D. F. Pugh.....	" "	3037	70 00
	E. E. Harrold.....	" "	3038	70 00
	N. H. Brown.....	" "	3039	70 00
	E. E. Somermeier.....	" "	3040	65 00
	F. Ruhlen	" "	3041	60 00
	T. K. Lewis.....	" "	3042	60 00
	A. F. Hall.....	" "	3043	60 00
	W. F. Lavery.....	" "	3044	60 00
	C. B. Frederick.....	" "	3045	60 00
	H. Townshend	" "	3046	55 00
	J. F. Cunningham.....	" "	3047	54 00
	G. S. Kellicott.....	" "	3048	50 00
	M. D. Jeffrey.....	" "	3049	50 00
	A. V. Bleininger.....	" "	3050	40 00
	L. Allen	" "	3051	40 00
	M. Dresbach	" "	3052	30 00
	F. A. Fish.....	" "	3053	30 00
	A. H. McIntire.....	" "	3054	30 00
	E. L. Ball.....	" "	3055	30 00
	S. E. Rasor.....	" "	3056	30 00
	H. Judd	" "	3057	30 00
	F. J. Hale.....	" "	3058	30 00
	J. B. Parker.....	" "	3059	30 00
	B. F. Maag.....	" "	3060	30 00
	J. H. Vosskuehler.....	" "	3061	30 00
	E. L. Fullmer.....	" "	3062	25 00
	R. Fischer	" "	3063	25 00
	F. O. Clements.....	" "	3064	25 00
	O. V. Brumley.....	" "	3065	20 00

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
April 29	R. C. Purdy	Salary April, 1899, inst.	3066	20 00
	G. W. Rightmire	" "	3067	20 00
	E. H. Bailey	" "	3068	15 00
	F. F. D. Albery	" "	3069	15 00
	J. H. Collins	" "	3070	10 00
	D. A. Kohr	" "	3071	10 00
	R. E. McIntosh	" "	3072	10 00
	C. B. Guittard	" "	3073	50 00
	H. Gamper	" "	3074	7 50
	W. C. McCracken	" "	3075	150 00
	Geo. Rose	" "	3076	65 00
	Chas. Low	" "	3077	54 17
	W. Standley	" "	3078	50 00
	B. LeBay	" "	3079	50 00
	T. Boude	" "	3080	45 00
	W. H. Case	" "	3081	45 00
	H. Martz	" "	3082	25 00
	M. Peck	" "	3083	40 00
	F. K. Luke	" "	3084	40 00
	A. Chantler	" "	3085	40 00
	G. A. Goodspeed	" "	3086	40 00
	J. H. Brown	" "	3087	40 00
	D. D. Geren	" "	3088	40 00
	W. Whitestine	" "	3089	40 00
	H. Chantler	" "	3090	40 00
	G. C. Denny	" "	3091	40 00
	M. N. Cook	" "	3092	40 00
	T. S. Edgington	" "	3093	40 00
	T. E. Osborn	" "	3094	40 00
	J. Kelley	" "	3095	35 00
	D. C. Huddleson	" "	3096	50 00
	W. C. Mills	" "	3097	25 00
	Mrs. E. R. Hubler	" "	3098	20 00
	W. Townsel	" "	3099	25 00
	W. C. Wier	" "	3100	20 00
	J. C. Perry	" "	3101	12 50
	G. W. Elwell	" "	3102	40 00
	A. G. McCall	" "	3103	20 00
	J. Covan	" "	3104	65 00
	W. F. Hunter	" "	3105	250 00
	G. W. Knight	" "	3106	250 00
	C. H. Woodruff	Carpentry	3107	60 00
May 1	Joe Garretson	Salary as plumber	3108	33 00
	Lily Weeks	Services as maid	3109	5 00
2	T. J. Godfrey	Expenses trustee	3110	7 63
	L. B. Wing	" "	3111	10 00
6	F. J. Pavlicek	Salary as guide	3112	4 12
	R. J. Seymour	Guide and messenger	3113	5 12
	F. R. West	" "	3114	1 12
	F. C. McKinney	" "	3115	4 25
	H. Gamper	Labor	3116	5 58
	J. H. Nold	"	3117	1 50
	K. Nurian	"	3118	1 50
	M. J. Snow	Messenger	3119	6 25
	Am. Jersey Cattle Club	Books	3120	1 00
	Publishers' Weekly	"	3121	1 58

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
ay 6	Library Bureau	Magazine	3122	1 00
	E. Doddington & Co.	Lumber	3123	1 00
	Colliery Eng. Co.	Magazine	3124	7 50
	G. M. Basford	"	3125	3 00
	Randall & Co.	"	3126	1 50
	J. J. Flather Treas.	Books	3127	12 80
	G. E. Stechert.	"	3128	192 97
	Univ of Chic. Press	Bot. gazette	3129	1 20
	Mrs. M. J. Kellenberger	Serv. dept. dom sci	3130	10 00
	Writer Pub. Co.	"The Writer"	3131	1 00
	Boston Book Co.	Books	3132	167 75
	M. A. B. Townshend.	"	3133	44 00
	J. Penn	Cartage	3134	4 10
	Spahr & Glenn	Printing	3135	5 00
	C. F. Sigrist	Labor	3136	1 75
	L. T. Williams	" in library	3137	10 25
	Am. Assn. for Adv. Sci.	Books	3138	3 38
	Am. Misc. Soc.	"	3139	22 00
	Burrows Bros. Co.	"	3140	295 70
	Am. Hist. Assn.	"	3141	25 00
	Penn. Fuel Co.	Coal	3142	18 04
	J. McAllister	Labor	3143	17 50
	W. Cannan	"	3144	8 75
	Col. Gas Co.	Coke	3145	7 68
	Buffalo Dent. Mfg. Co.	Furnace	3146	8 50
	Blackw'd, Green & Co.	Iron tank and basins	3147	12 30
	Hammond & Co.	Lab. supplies	3148	24 71
	W. H. Haskins	Advertising	3149	11 25
	H. Braun Sons & Co.	App. and lab. supplies	3150	3 82
	Nitschke Bros	Ink	3151	50
	C. U. Tel. Co.	Telephones	3152	96 95
	Col. Transfer Co.	Drayage	3153	1 00
	C. O. Oil Co.	Oil	3154	35 11
	Orvis & Marshall	Office supplies	3155	2 90
	Ind. Alkali Wks.	Savogran	3156	18 20
	G. T. Johnson	Toilet paper	3157	7 50
	Mrs. E. R. Hubler	Clerical work	3158	11 35
	Hann & Adair	Printing	3159	6 25
	Keuffel & Esser	Maduro paper	3160	3 20
	Macmillan & Co.	Books	3161	8 71
	R. C. Osborn	Labor	3162	10 20
	Schoedinger, F. & Co.	Hdwe	3163	5 93
	C. Zinn	Brass castings	3164	6 25
	Jeffrey Mfg. Co.	Varnish	3165	1 30
	H. W. Johns Mfg. Co.	Twine	3166	75
	M. C. Hunter	Labor	3167	5 85
	Erner & Hopkins	Elect. supplies	3168	35 76
	W. R. Lazenby	Cash advanced, trees	3169	2 75
	C. H. Fleming	Labor	3170	12 00
	H. L. Belden	"	3171	7 75
	A. F. Wilcox	"	3172	7 65
	McClelland & Co.	Map	3173	4 80
	L. W. Curtis	"	3174	5 15
	Drawing Supply Store.	Supplies	3175	1 52
	Frankenberg Bros	Trays	3176	5 60
	Albaugh N. O. Co.	Trees	3177	54 50

STATEMENT II—Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
May 6	Cushman Glad. Co....	Gladioli	3178	10 00
	T. W. Whiteman.....	Plowing	3179	9 00
	M. Crawford	Plants	3180	18 00
	W. Roberts	Labor	3181	18 90
	Ohio Agr. Exp. Sta...	Potatoes	3182	35 20
	J. S. Teter.....	Labor	3183	17 50
	R. W. Funk.....	"	3184	27 82
	W. H. Anderson & Co.	Books	3185	212 50
	F. H. Tibbitts.....	Printing	3186	1 25
	E. Thompson & Co....	Books	3187	6 00
	Col. Supply Co.....	Hdwe	3188	26 88
	Cap. City Mch. Wks..	"	3189	80
	Crosby S. Gag. & V. Co	Cocks	3190	10 50
	J. G. Pulling & Co....	Valves	3191	2 00
	E. G. Bailey.....	Extra services	3192	5 63
	C. W. Weick.....	Cash adv. and tools.....	3193	6 00
	B. M. Green.....	Clerical work	3194	1 84
	O. S. Acad. of Sci....	Printing "Odonata".....	3195	30 00
	Ohio Conf. Minutes...	Advertising	3196	10 00
	Laning Ptg. Co.....	Printing	3197	23 00
	J. V. Denney.....	Exp. visit high school.....	3198	19 55
	S. C. Derby.....	" "	3199	15 50
	Champlin Ptg. Co.....	Printing	3200	42 80
	C. P. Linhart.....	Cash adv. for trial set.....	3201	3 50
	F. F. Bonnet.....	Clocks	3202	8 50
	A. G. Spaulding & Bros	Lunger	3203	2 10
	Franklin Toil. Sup. Co.	Laundry	3204	26 85
	South Bend Iron Wks.	Plow	3205	9 88
	Wellington Box Co...	Boxes	3206	3 41
	Diamond Crystal S. Co.	Salt	3207	2 25
	J. K. Farver.....	Repairs	3208	2 00
	W. H. Reid.....	Tools	3209	1 50
	B. Fargo & Co.....	Bottles	3210	2 62
	F. S. Johnston.....	Clerical work	3211	15 45
	Glucose Sug. Ref. Co..	Meal	3212	29 25
	Hager & Graves.....	Groceries	3213	14 43
	M. C. Payne.....	Books	3214	13 25
	Alphea Dairy Co.....	Milk	3215	6 49
	J. S. Abbott & Co.....	Hardware	3216	2 88
	Engelke & Bigelow....	Freight and cartage..	3217	55 17
	Murray City Coal Co..	Coal	3218	590 00
	Tallmadge Hdw. Co...	Hdwe	3219	13 62
	Borger Bros. & Co....	Repairs	3220	1 85
	Burgess Sold. Furn. Co	"	3221	7 5
	Col. Brass Co.....	Urinal, copper, etc.....	3222	36 [illegible]
	W. Erdman	Labor	3223	13 [illegible]
	G. M. Berndroth.....	"	3224	14 4[illegible]
	B. B. Wells.....	"	3225	10 0[illegible]
	Kimball & Mathews...	Photo supplies	3226	3 95
	P. P. Hammon.....	Freight and cartage	3227	55 17
	H. S. Adams.....	"	3228	2 56
	A. Spittal	Labor	3229	55 50
	H. Cole	Lenses	3230	14 90
	J. G. Biddle.....	Scientific instruments	3231	173 25
	West. Elec. Co.....	Elect. supplies	3232	17 82
	Eimer & Amend.....	Machine parts	3233	40 02

STATEMENT II — Continued.

	To whom paid.	For what purpose.	No.	Amount
6	L. Fink	Moulding	3234	1 44
	Schroth & Potter	Lumber	3235	9 15
	C. H. Woodruff	Cash adv. for hdwe	3236	75
	J. M. Barringer	Lab. work	3237	1 95
	W Morelan	Carpentry	3238	3 80
	Chic. Lab. Sup. & S. Co	Elec. supplies	3239	98 05
	Baker & Co	Plat. ware	3240	66 65
	Kauffman Lattimer Co.	Chem. and supplies	3241	101 86
	Richards & Co	Chem. app	3242	27 75
	Chicago B. P. Pap. Co.	B. P. paper	3243	2 64
	Am. Aristotype Co	Mdse	3244	7 19
	H. Goldsmith	Musical supplies	3245	5 60
	H. R. Marietta	" "	3246	50
	Allyn & Bacon	Books	3247	10 50
	W. C. Mills	Cash adv. for postage	3248	84
	Col. M. & M. S. Co	Mch. supplies	3249	25 60
	Kelton & Converse	Lumber	3250	99 56
	B. D. Potts	Hdwe	3251	8 64
	Col. Gas Co	Gas	3252	126 83
8	F. C. Clark	Cash adv. for files	3253	2 75
	Lily Weeks	Maid	3254	5 00
10	W. I. Chamberlain	Expenses trustee	3255	12 43
	J. McL. Smith	" "	3256	5 70
	R. M. Rownd, P. M.	Stamped envelopes	3257	21 40
12	Crosby Stm. G. & V. Co	Apparatus	3258	61 74
	G. Bruder	Salary as bandmaster	3259	94 00
15	T. E. Osborn	" to date	3260	20 00
	Lily Weeks	Maid	3261	5 00
	Lily Weeks	Serv. as janitress	3262	17 15
	Harrison, Olds & Co.	Legal serv. in Page will case	3263	1,000 00
22	Lily Weeks	Serv. dept. ph. train	3264	7 50
23	Mrs. M. J. Kellenberger	" dom. sci	3265	15 00
25	T. J. Godfrey	Exp. as trustee	3266	19 75
27	L. B. Wing	"	3267	12 00
	J. H. Canfield	Salary May, 1899, inst	3268	500 00
	Alexis Cope	" "	3269	187 50
	C. E. Barnet	" "	3270	65 00
	F. W. Prentiss	" "	3271	33 33
	Jean Blackford	" "	3272	54 17
	E. D. Cockins	" "	3273	58 33
	T. F. Hunt	" "	3274	250 00
	W. F. Hunter	" "	3275	250 00
	G. W. Knight	" "	3276	250 00
	W. A. Kellerman	" "	3277	225 00
	W. McPherson	" "	3278	225 00
	C. N. Brown	" "	3279	225 00
	A. C. Barrows	" "	3280	225 00
	Edw. Orton	" "	3281	225 00
	E. A. Eggers	Salary May and June, insts.	3282	450 00
	J. R. Smith	Salary May, 1899, inst	3283	225 00
	H. A. Weber	" "	3284	225 00
	W. R. Lazenby	" "	3285	225 00
	S. C. Derby	" "	3286	225 00
	A. M. Bleile	" "	3287	225 00
	W. T. Magruder	" "	3288	225 00
	R. D. Bohannan	" "	3289	225 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
May 27	J. P. Gordy	Salary May, 1899, inst	3290	225 00
	W. H. Scott	" "	3291	225 00
	B. F. Thomas	" "	3292	225 00
	J. V. Denney	" "	3293	225 00
	B. L. Bowen	Salary May and June, 1899, insts	3294	450 00
	H. Osborn	Salary May, 1899, inst	3295	225 00
	N. W. Lord	" "	3296	200 00
	F. A. Ray	" "	3297	200 00
	G. B. Kauffman	" "	3298	200 00
	F. E. Sanborn	" "	3299	45 00
	Edw. Orton, Jr	" "	3300	180 00
	J. N. Bradford	" "	3301	180 00
	G. W. McCoard	" "	3302	160 00
	C. P. Linhart	" "	3303	160 00
	H. C. Lord	" "	3304	160 00
	E. A. Hitchcock	" "	3305	150 00
	D. S. White	" "	3306	150 00
	W. D. Gibbs	" "	3307	140 00
	P. G. Bowman	" "	3308	140 00
	F. C. Caldwell	" "	3309	140 00
	F. C. Clark	" "	3310	135 00
	W. H. Page	" "	3311	135 00
	S. A. Norton	" "	3312	120 00
	R. I. Fulton	" "	3313	120 00
	W. H. Siebert	" "	3314	120 00
	O. B. Jones	" "	3315	120 00
	J. E. Boyd	" "	3316	120 00
	E. B. Kinkead	" "	3317	110 00
	J. R. Taylor	" "	3318	110 00
	C. E. Sherman	" "	3319	100 00
	T. E. French	" "	3320	100 00
	C. W. Mesloh	" "	3321	100 00
	C. L. Arnold	" "	3322	100 00
	K. D. Swartzel	" "	3323	100 00
	A. W. Hodgman	" "	3324	100 00
	W. A. Knight	" "	3325	95 00
	C. W. Weick	" "	3326	95 00
	F. W. Smyser	" "	3327	80 00
	J. H. Schaffner	" "	3328	90 00
	C. W. Foulk	" "	3329	90 00
	J. A. Bownocker	" "	3330	90 00
	C. A. Dye	" "	3331	90 00
	W. L. Graves	" "	3332	90 00
	J. S. Hine	" "	3333	85 00
	F. L. Landacre	" "	3334	85 00
	A. E. Vinson	" "	3335	80 00
	E. M. Van Harlingen	" "	3336	80 00
	M. P. Brush	" "	3337	80 00
	C. Wissler	" "	3338	80 00
	C. Souther	" "	3339	80 00
	S. M. Elliott	" "	3340	75 00
	E. O. Randall	" "	3341	70 00
	D. F. Pugh	" "	3342	70 00
	E. E. Harrold	" "	3343	70 00
	N. H. Brown	" "	3344	70 00

STATEMENT II—Continued.

).	To whom paid.	For what purpose.	No.	Amount.
27	E. E. Somermeier.....	Salary May, 1899, inst.....	3345	65 00
	F. Ruhlen	" "	3346	60 00
	T. K. Lewis.....	" "	3347	60 00
	A. F. Hall.....	" "	3348	60 00
	W. F. Lavery.....	" "	3349	60 00
	C. B. Frederick.....	" "	3350	60 00
	H. Townshend	" "	3351	55 00
	J. F. Cunningham.....	" "	3352	54 00
	G. S. Kellicott.....	" "	3353	50 00
	M. D. Jeffrey.....	" "	3354	50 00
	A. V. Bleininger.....	" "	3355	40 00
	L. Allen	" "	3356	40 00
	M. Dresbach	" "	3357	30 00
	F. A. Fish.....	" "	3358	30 00
	A. H. McIntire.....	" "	3359	30 00
	E. L. Ball.....	" "	3360	30 00
	S. E. Rasor.....	" "	3361	30 00
	H. Judd	" "	3362	30 00
	F. J. Hale.....	" "	3363	30 00
	J. B. Parker.....	" "	3364	30 00
	B. F. Maag.....	" "	3365	30 00
	J. H. Vosskuehler.....	" "	3366	30 00
	E. L. Fullmer.....	" "	3367	25 00
	R. Fischer	" "	3368	25 00
	F. O. Clements.....	" "	3369	25 00
	O. V. Brumley.....	" "	3370	20 00
	R. C. Purdy.....	" "	3371	20 00
	G. W. Rightmire.....	" "	3372	20 00
	E. H. Bailey.....	" "	3373	15 00
	F. F. D. Albery.....	" "	3374	15 00
	J. H. Collins.....	" "	3375	10 00
	D. A. Kohr.....	" "	3376	10 00
	R. E. McIntosh.....	" "	3377	10 00
	C. B. Guittard.....	" "	3378	50 00
	H. Gamper.....	" "	3379	7 50
	W. C. McCracken.....	" "	3380	150 00
	Geo. Rose	" "	3381	65 00
	Chas. Low	" "	3382	54 17
	W. Standley	" "	3383	50 00
	B. LeBay	" "	3384	50 00
	T. Boude	" "	3385	45 00
	W. H. Case.....	" "	3386	45 00
	D. Clifford	" "	3387	45 00
	M. Peck	" "	3388	40 00
	F. K. Luke.....	" "	3389	40 00
	A. Chantler	" "	3390	40 00
	G. A. Goodspeed.....	" "	3391	40 00
	J. H. Brown.....	" "	3392	40 00
	D. D. Geren.....	" "	3393	40 00
	W. Whitestine	" "	3394	40 00
	H. Chantler	" "	2295	40 00
	G. C. Denny.....	" "	3396	40 00
	M. V. Cook.....	" "	3397	40 00
	T. S. Edgington.....	" "	3398	40 00
	J. Kelley	" "	3399	35 00
	W. C. Mills.....	" "	3400	25 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
May 27	Mrs. E. R. Hubler....	Salary May, 1899, inst	3401	20 00
	W. Townsel	" "	3402	25 00
	W. C. Wier.....	" "	3403	20 00
	G. W. Elwell.....	" "	3404	40 00
	A. G. McCall.....	" "	3405	20 00
	J. Covan	" "	3406	65 00
	C. H. Woodruff.....	" "	3407	60 00
25	F. W. Prentiss.....	Int. on $70,000 6 per cent bonds	3408	2,100 00
	F. W. Prentiss.....	Int. on $160,000 4½ per		
	F. W. Prentiss.....	cent bonds.....	3409	3,600 00
	F. W. Prentiss.....	Int. on $150,000 bonds....	3410	3,375 00
	Hager & Graves.....	Groceries	3411	14 09
	Alphea Dairy Co.....	Milk	3412	69
	Schoedinger, F. & Co.	Ice cream freezer	3413	5 81
	Busy Bee Candy K. Co	Nuts	3414	55
	L. A. Vance.....	Mdse	3415	85
	C. P. Souther.....	Cash advanced	3416	1 67
	Crosby St. G. & V. Co.	Apparatus	3417	60 52
	Erie Gas. Engine Co..	Ft. on engine	3418	11 88
	Hammond & S.....	Specimens	3419	7 75
	McDonald Bros	Stove grate	3420	49
	B. S .Stephenson.....	Clerical work	3421	5 00
	W Morelan	Carpentry	3422	1 00
	E. Doddington & Co...	Lumber	3423	19 55
	G. E. Stechert.....	Books	3424	89 69
	J. H. Nold.....	Labor	3425	3 30
	Tallmadge Hdw. Co...	Hdwe	3426	4 27
	Col. M. & M. G. Co...	"	3427	9 04
	Hart & Crouse.....	Grate bars	3428	3 62
	Col. Brass Co.....	Float	3429	1 25
	Kelton & Converse....	Lumber	3430	1 27
	Champlin Ptg. Co.....	Printing	3431	72 50
	Stumpf & Steurer.....	Advertising	3432	7 00
27	Laning Ptg. Co.....	Printing	3433	150 00
	W. B. Dana	Advertising	3434	10 00
	J. E. Baldridge.....	"	3435	9 00
	G. W. Knight.....	Expenses visit schools.....	3436	13 75
	J. R. Smith.....	" "	3437	23 10
	W. H. Scott.....	" "	3438	18 11
	A. C. Barrows.....	" "	3439	12 25
	H. Cole Co.....	Mirror	3440	1 00
	H. Boker & Co.....	Resistance wire	3441	3 36
	Queen & Co.....	Scientific instruments.....	3442	142 10
	Am. Hard. Rubber Co.	Rubber	3443	14 37
	A. Spittal	Labor	3444	27 00
	G. M. Parsons.....	Refund of fees	3445	5 00
	B. D. Potts.....	Hardware	3446	12 92
	Blackw'd, Green & Co.	"	3447	5 40
	C. P. Linville.....	Labor	3448	1 35
	Wm. McPherson	Cash advanced	3449	6 22
	Col. Supply Co.....	Hardware	3450	12 68
	Ginn & Co.....	Books	3451	6 64
	B. L. Bowen.....	Cash advanced	3452	10 00
	Penna. Fuel Co.....	Coal	3453	49 13
	McClelland & Co.....	Ink	3454	25

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
ay 27	Hann & Adair	Printing	3455	14 30
	Cherington P. & E. Co.	"	3456	5 00
	F. W. Prentiss, V. Pt.	Bonds due June 1, 1899, 6 per cent	3457	10,000 00
	Spahr & Glenn	Printing	3458	20 25
	K. A. Orvis	Office supplies	3459	3 00
	Mrs. E. R. Hubler	Clerical work	3460	9 87
	C. U. Tel. Co.	Telephone service	3461	45
	Mrs. F. E. Meyers	Laundry	3462	4 00
	J. F. Ridenour	Office supplies	3463	1 00
	Lawrence Press Co.	Printing	3464	5 75
	G. H. Young, Tr.	Membership dues	3465	5 00
	J. Penn	Carting	3466	1 50
	Cent. Ohio Paper Co.	Envelopes	3467	5 20
	Webb Sta. & Ptg. Co.	Office supplies	3468	10 65
	H. Braun Sons & Co.	Red lead	3469	32
	J. M. & W. Westwater.	Burners	3470	1 50
	J. H. Grove	Insurance	3471	34 00
	Standard Oil Co.	Oil	3472	8 50
	J. McL. Smith	Expenses as trustee	3473	6 20
29	J. T. Mack	" "	3474	21 35
31	Lily Weeks	Janitor service	3475	7 50
	R. M. Rownd, P. M.	Postage	3476	35 00
ne 1	J. H. Collins	Salary June, 1899, inst.	3477	10 00
3	Lily Weeks	Serv. dept. phy. train.	3478	5 00
	F. F. D. Albery	1-10 salary June, 1899, inst.	3479	15 00
5	F. W. Smyser	June salary	3480	80 00
6	J. R. Taylor	"	3481	110 00
	C. W. Shepherd	Fees remitted for serv. band	3482	15 00
	R. A. Abbott	" " "	3483	15 00
	H. A. White	Honorarium for serv. as commandant	3484	50 00
	Col. Gas Co.	Gas bill for May	3485	119 40
	M. P. Brush	June salary	3486	80 00
	O. B. Jones	Salary June, 1899, inst.	3487	120 00
8	E. O. Randall	" "	3488	70 00
	J. H. Canfield	" "	3489	500 00
	Alexis Cope	" "	3490	187 50
	C. E. Barnet	" "	3491	65 00
	F. W. Prentiss	" "	3492	33 33
	Jean Blackford	" "	3493	54 17
	E. D. Cockins	" "	3494	58 33
	T. F. Hunt	" "	3495	250 00
	W. F. Hunter	" "	3496	250 00
	G. W. Knight	" "	3497	250 00
	W. A. Kellerman	" "	3498	225 00
	W. McPherson	" "	3499	225 00
	C. N. Brown	" "	3500	225 00
	A. C. Barrows	" "	3501	225 00
	Edw. Orton	" "	3502	225 00
	J. R. Smith	" "	3503	225 00
	H. A. Weber	" "	3504	225 00
	W. R. Lazenby	" "	3505	225 00
	S. C. Derby	" "	3506	225 00
	A. M. Bleile	" "	3507	225 00
	R. D. Bohannan	" "	3508	225 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amou
1899.				
June 8	W. F. Magruder.....	Salary June, 1899, inst.....	3509	22
	J. P. Gordy.....	" "	3510	22
	W. H. Scott.....	" "	3511	22
	B. F. Thomas.....	" "	3512	22
	J. V. Denney.....	" "	3513	22
	H. Osborn	" "	3514	22
	N. W. Lord.....	" "	3515	20
	F. A. Ray.....	" "	3516	20
	G. B. Kauffman.....	" "	3517	20
	Edw. Orton, Jr.....	" "	3518	18
	J. N. Bradford.....	" "	3519	18
	F. E. Sanborn.....	" "	3520	18
	G. W. McCoard.....	" "	3521	16
	C. P. Linhart.....	" "	3522	16
	H. C. Lord.....	" "	3523	16
	E. A. Hitchcock.....	" "	3524	15
	D. S. White.....	" "	3525	15
	W. D. Gibbs.....	" "	3526	14
	P. G. Bowman.....	" "	3527	14
	F. C. Caldwell.....	" "	3528	14
	F. C. Clark.....	" "	3529	13
	W. H. Page.....	" "	3530	13
	S. A. Norton.....	" "	3531	12
	R. I. Fulton.....	" "	3532	12
	W. H. Siebert.....	" "	3533	12
	J. E. Boyd.....	" "	3534	12
	E. B. Kinkead.....	" "	3535	11
	C. E. Sherman.....	" "	3536	10
	T. E. French.....	" "	3537	10
	C. W. Mesloh.....	" "	3538	10
	C. L. Arnold.....	" "	3539	10
	K. D. Swartzel.....	" "	3540	10
	A. W. Hodgman.....	" "	3541	10
	W. A. Knight.....	" "	3542	9
	C. W. Weick.....	" "	3543	9
	J. H. Schaffner.....	" "	3544	9
	C. W. Foulk.....	" "	3545	9
	J. A. Bownocker.....	" "	3546	9
	C. A. Dye.....	" "	3547	9
	W. L. Graves.....	" "	3548	9
	J. S. Hine.....	" "	3549	8
	F. L. Landacre.....	" "	3550	8
	A. E. Vinson.....	" "	3551	8
	E. M. Van Harlingen..	" "	3552	8
	C. Wissler	" "	3553	8
	C. Souther	" "	3554	8
	S. M. Elliott.....	" "	3555	7
	D. F. Pugh.....	" "	3556	7
	E. E. Harrold.....	" "	3557	7
	N. H. Brown.....	" "	3558	7
	E. E. Somermeier.....	" "	3559	6
	F. Ruhlen	" "	3560	6
	T. K. Lewis.....	" "	3561	6
	A. F. Hall.....	" "	3562	6
	W. F. Lavery.....	" "	3563	6
	C. B. Frederick.....	" "	3564	6

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
June 8	H. Townshend	Salary June, 1899, inst.....	3565	55 00
	J. F. Cunningham.....	" "	3566	54 00
	G. S. Kellicott.....	" "	3567	50 00
	M. D. Jeffrey.....	" "	3568	50 00
	A. V. Bleininger.....	" "	3569	40 00
	Lucy Allen	" "	3570	40 00
	M. Dresbach	" "	3571	30 00
	F. A. Fish.....	" "	3572	30 00
	A. H. McIntire.....	" "	3573	30 00
	E. L. Ball.....	" "	3574	30 00
	S. E. Rasor.....	" "	3575	30 00
	H. Judd	" "	3576	30 00
	F. J. Hale.....	" "	3577	30 00
	J. B. Parker.....	" "	3578	30 00
	B. F. Maag.....	" "	3579	30 00
	J. H. Vosskuehler....	" "	3580	30 00
	E. L. Fullmer.....	" "	3581	25 00
	R. Fischer	" "	3582	25 00
	F. O. Clements.....	" "	3583	25 00
	O. V. Brumley.....	" "	3584	20 00
	R. C. Purdy.....	" "	3585	20 00
	G. W. Rightmire.....	" "	3586	20 00
	E. H. Bailey.....	" "	3587	15 00
	D. A. Kohr.....	" "	3588	10 00
	R. E. McIntosh.....	" "	3589	10 00
	H. Gamper	" "	3590	7 50
	W. C. McCracken.....	" "	3591	150 00
	Geo. Rose	" "	3592	65 00
	Chas. Low	" "	3593	54 17
	W. Standley	" "	3594	50 00
	B. LeBay	" "	3595	50 00
	T. Boude	" "	3596	45 00
	D. Clifford	" "	3597	45 00
	M. Peck	" "	3598	40 00
	F. K. Luke.....	" "	3599	40 00
	A. Chantler	" "	3600	40 00
	G. A. Goodspeed.....	" "	3601	40 00
	J. H. Brown.....	" "	3602	40 00
	D. D. Geren.....	" "	3603	40 00
	W. Whitestine	" "	3604	40 00
	H. Chantler	" "	3605	40 00
	G. C. Denny.....	" "	3606	40 00
	M. N. Cook.....	" "	3607	40 00
	J. Kelley	" "	3608	35 00
	W. C. Mills.....	" "	3609	25 00
	Mrs. E. R. Hubler....	" "	3610	20 00
	W. Townsel	" "	3611	25 00
	W. C. Wier.....	" "	3612	20 00
	A. G. McCall.....	" "	3613	20 00
	C. H. Woodruff.....	Services as carpenter	3614	60 00
8	Philip Long	Meals furn. trustees	3615	6 75
	B. S. Stephenson.....	Salary as quartermaster	3616	5 00
9	J. W. Smith.....	Lectures in Meteorology ..	3617	100 00
12	H. W. Hurlbut.....	Honorarium Bac. address..	3618	35 00
	J. H. Canfield.....	Cash adv. for guide	3619	2 75
	R. R. Bowker.....	Index	3620	2 00

STATEMENT II — Continued.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
June 14	Helman Taylor Co....	Books	3621	10 35
	Natl. Educat. Assn....	Membership dues	3622	2 00
	Cambridge Ent. Club..	Magazine	3623	2 00
	Boston Book Co.....	Books	3624	85 50
	Burrows Bros. Book Co	"	3625	33 78
	G. E. Stechert.....	"	3626	51 40
	L. T. Williams.....	Work in library	3627	12 83
	Am. Chem. Journal....	Books	3628	9 00
	Seraphim Blank Bk. Co	Binding	3629	144 40
	Cap. City Mch. Wks..	Belting	3630	14 56
	Ashcroft Mfg Co.....	Planimeter	3631	12 75
	F. S. Johnston.....	Stenog. work	3632	9 05
	F. J. Hale.....	Drafting	3633	5 85
	E. H. Bailey.....	Labor	3634	13 65
	E. G. Bailey	"	3635	9 75
	E. Doddington & Co..	Lumber	3636	80
	W. T. Magruder.....	Cash advanced	3637	38
	Crosby S. Gag. & V. Co	Supplies	3638	14 87
	Penberthy Injector Co.	Repairs	3639	1 00
	Erner & Hopkins.....	Supplies	3640	75
	Campbell P. P. & M. Co	Counters	3641	10 40
	J. S. Bushnell.....	Ideal wheel	3642	13 00
	Howald & Conklin....	Shades	3643	16 15
	J. L. Roberts & Son...	Spring	3644	2 25
	W. C. Heller & Co....	Steel boxes	3645	1 90
	Mrs. L. H. Bulkley...	Desk	3646	12 00
	M. T. Davidson.....	Valves, etc.....	3647	3 20
	A. H. Smythe.....	Cases	3648	4 00
	Col. Brass Co.....	Brass	3649	20
	Boston Book Co.....	Books	3650	50 00
	McClelland & Co.....	Neostyle paper	3651	60
	J. Carbutt	Photo supplies	3652	4 20
	Kauffman Lattimer Co.	Supplies	3653	68 26
	E. Greiner	Glassware	3654	13 05
	Am. Aristotype Co....	Supplies	3655	8 32
	S. M. Elliott.....	Cash advanced	3656	4 32
	L. F. Sater, Atty. for S. F. James	Settlement in full.....	3657	200 00
	Hatton Bros	Bandages and plaster	3658	2 70
	G. W. Rightmire.....	Cash advanced	3659	4 50
	C. P. Linhart.....	"	3660	1 60
	H. Gamper	Labor	3661	12 30
	A. H. Lyon.....	"	3662	5 25
	F. E. Sanborn.....	Cash advanced	3663	19 90
	J. H. Nold.....	Labor	3664	1 20
	Alum Creek Coal Co..	Coal	3665	7 50
	E. E. Somermeier.....	Cash advanced	3666	1 50
	Penna. Fuel Co.....	Coal	3667	5 29
	F. O. Clements.....	Extra services	3668	2 62
	F. J. Jeffrey.....	Labor	3669	13 88
	K. A. Passarge.....	Tuning piano	3670	2 00
	Z. L. White.....	Dry goods	3671	1 00
	T. K. Lewis.....	Photo supplies	3672	13 68
	A. Dobbie	Dry goods	3673	7 57
	General Elec. Co.....	Elect supplies	3674	4 50
	A. Spittal	Labor	3675	45 00

STATEMENT II — Continued.

ate.	To whom paid.	For what purpose.	No.	Amount.
899.				
14	S. A. Stedman.....	Surveys Pike Co.....	3676	10 00
	H. Osborn	Cash advanced	3677	10 78
	R. W. Funk.....	Labor	3678	12 75
	Haussman & Dunn....	Apparatus	3679	13 38
	J. Wannamaker	Books	3680	57 92
	C. C. Ely.....	"	3681	4 00
	Spahr & Glenn.....	Printing	3682	23 50
	Penna, Fuel Co.....	Coal	3683	30 28
	Champlin Ptg. Co.....	Printing	3684	9 35
	F. R. West.....	Sterescope views	3685	12 00
	Engelke & Bigelow....	Freight and cartage.....	3686	39 36
	Murray City Coal Co..	Coal	3687	323 33
	A. McMichall	Lettering diplomas	3688	23 20
	Bee Pub. Co.....	Advertising	3689	12 50
	Col. Litho. Co.....	Printing	3690	35 00
	Col. Bank Note Co....	"	3691	127 00
	Ohio State Journal Co.	Advertising	3692	11 65
	Orvis & Marshall.....	Tpw. ribbon	3693	1 00
	Enquirer Co.....	Advertising	3694	11 65
	Blackw'd, Green & Co.	Iron	3695	50
	Jeffrey Mfg. Co.....	Wire	3696	50
	Natl. Carbon Co.....	Elect. supplies	3697	87
	R. E. McIntosh.....	Labor	3698	12 37
	J. C. Perry.....	"	3699	7 31
	F. E. Fleischer.....	"	3700	17 75
	F. S. Johnston.....	Clerical service	3701	16 20
	D. C. Beggs.....	Mats	3702	3 00
	Kilbourne & J. Mfg. Co	Hdwe	3703	10 00
	J. S. Abbott & Co.....	"	3704	36 05
	D. M. Massie.....	Expenses as trustee	3705	45 27
	E. Thompson & Co....	Books	3706	6 00
	W. H. Anderson.....	"	3707	18 00
	G. Bruder	Serv. as bandmaster	3708	22 00
	R. H Marriott	Copying cadet records.....	3709	3 00
	Agr. Student Pub. Co.	Advertising	3710	20 00
	Makio, 1889	"	3711	50 00
	The Lantern	"	3712	55 00
	O. T Corson.....	"	3713	22 50
	Assemb. & C. M. Her'd	"	3714	10 00
	The Adytum of '99....	"	3715	6 00
	Col. Wire & Iron Wks.	Wire guards	3716	11 50
	Col. M. & M. Sup. Co.	Rubber	3717	2 06
	Jno. McAllister	Labor	3718	18 00
	Standard Oil Co.....	Coal oil	3719	98
	Erner & Hopkins.....	Elect. supplies	3720	14 93
	M. C. Hunter.....	Labor	3721	5 32
	P Hayden S. Hdw Co	Metal	3722	18 64
	Kelton & Converse....	Lumber	3723	17 24
	Haydenv'le M. & M. Co	Coke	3724	10 55
	Hampden C. Wheel Co.	Emery wheel	3725	17 50
	Brown & S. Mfg. Co..	Castings	3726	3 71
	C. W. Weick.....	Extra services	3727	5 00
	C. A. Strelinger Co....	Chisels	3728	7 20
	B. B. Wells.....	Labor	3729	9 52
	Hall Collins Hdw. Co	Office supplies	3730	2 18
	W. Erdman	Labor	3731	15 05

STATEMENT II — Concluded.

Date.	To whom paid.	For what purpose.	No.	Amount.
1899.				
June 14	Tallmadge Hdw. Co...	Hdwe	3732	20 57
	Miller Furn. Co.....	Furniture	3733	15 00
	Hager & Graves.....	Groceries	3734	23 82
	Mrs. M. J. Kellenberger	Serv. dept. dom. sci.....	3735	17 15
	Livingston's Seed Co..	Roses	3736	2 00
	P. G. Bowman.....	Cash advanced	3737	2 53
	W. H. Zink.....	Police service	3738	4 00
	Col. Supply Co.....	Hardware	3739	18 82
	Cent. O. Paper Co....	Paper	3740	43 75
	Kimball & Mathews...	Photo supplies	3741	15 32
	Schoedinger, F. & Co..	Hdwe	3742	8 10
	Dunn, Taft & Co.....	Dry goods	3743	8 49
	Nitschke Bros	Printing	3744	6 50
	Franklin Toil. Sup. Co.	Laundry	3745	25 79
	F. C. Caldwell.....	Salary for extra services....	3746	50 00
	J. W. Gleed.....	Honorarium for com. ad....	3747	50 00
	J. T. Mack.....	Expenses as trustee	3748	29 73
	J. A. Shauck.....	Salary, 1898-9	3749	100 00
	P. G. Bowman.....	Cash advanced	3750	13 45
	F. E. Sanborn.....	"	3751	5 70
15	J. McL. Smith.....	Expenses as trustee	3752	26 00
20	F. C. McKinney.....	Guide and mess. duty.....	3753	13 37
	R. J. Seymour.....	" "	3754	6 37
	M. Snow	" "	3755	7 50
	F. R. West.....	" "	3756	2 75
	J. F. Travis.....	Services as mess. and guide.	3757	3 12
	A. E. Day.....	" " " .	3758	2 12
	Florence L. Bell.....	Work in record office.....	3759	2 45
	R. M. Rownd, P. M...	Postage	3760	22 00
	B. B. Wells.....	Labor	3761	11 00
	L. B. Wing.....	Expenses as trustee	3762	14 00
23	D. C. Beggs Co.....	Repp	3763	7 13
	Paul Jones	Expenses as trustee	3764	20 40
	J. McL. Smith.....	" "	3765	7 81
24	Joe Garretson	Salary as plumb. helper....	3766	39 00
	J. C. Covan.....	Labor	3767	22 88
26	J. C. Sullivan.....	Refund of fees	3768	30 00
28	E. H. Bailey.....	Labor	3769	2 47
	E. G. Bailey.....	"	3770	11 07
	Col. Machine Co.....	Damage to gas engine	3771	100 00
	R. W. Funk.....	Labor	3772	19 58
30	By balance			9,088 04
	Total			$277,573 06

STATEMENT III.

In compliance with section 7 of the *Organic Act*, passed by the Legislature of Ohio, May 1, 1878, (Bates Annotated Ohio Statutes, sec. 4105–41) which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Employes.	Position.	Salary.
James H. Canfield	President	$6,000 00
W. H. Scott	Professor of Philosophy	2,250 00
Edward Orton	" geology	2,250 00
W. R. Lazenby	" horticulture and forestry	2,250 00
Josiah R. Smith	" Greek language & literature	2,500 00
Henry A. Weber	" agricultural chemistry	2,250 00
Benj. F. Thomas	" physics	2,500 00
Geo. W. Knight	" history and political science	2 250 00
R. Daniel Bohannan	" mathematics and astronomy	2,250 00
Herbert Osborne	" zoology and entomology	2,250 00
Ernst A. Eggers	" German language, literature	2,250 00
C. Newton Brown	" civil engineering	2,250 00
Albert M. Bleile	" anatomy and physiology	2,250 00
Wm. A. Kellerman	" botany	2,250 00
Thos. F. Hunt	" agriculture	2,250 00
Samuel C. Derby	" Latin language, literature	2,250 00
Nathaniel W. Lord	" metallurgy and mineralogy	2,000 00
Frank E. Sanborn	Director of industrial department	1,800 00
Albert C. Barrows	Professor of English literature	2,250 00
Joseph V. Denney	" rhetoric and Eng'sh lang'ge	2,250 00
Benj. L. Bowen	" Romance languages	2,250 00
W. F. Hunter	Dean of law faculty	2,250 00
Geo B. Kauffman	Professor of pharmacy	2,000 00
J. P. Gordy	" pedagogy	2,250 00
Robt. I. Fulton	" elocution and oratory	1,200 00
Wm. T. Magruder	" mechanical engineering	2,250 00
Edward Orton, Jr.	Director school of ceramics	1,800 00
Frank A. Ray	Associate professor mining engineering	2,000 00
Jos. N. Bradford	" " drawing	1,800 00
Wm. McPherson	" " chemistry	2,250 00
Geo. W. McCoard	Assistant professor mathematics	1,600 00
Sidney A. Norton	Lecturer in general chemistry	1,200 00
F. C. Caldwell	Associate professor physics	1,700 00
Henry C. Lord	Director observatory	1,600 00
C. E. Sherman	Assistant professor civil engineering	1,000 00
E. A. Hitchcock	Associate professor mech'l engineering	1,500 00
W. D. Gibbs	Assistant " agriculture	1,400 00
C. W. Mesloh	" " German	1,000 00
David S. White	Professor veterinary medicine	1,500 00
Thos. E. French	Assistant in drawing	1,000 00
F. C. Clark	" professor of economics	1,350 00
Olive B Jones	Librarian	1,200 00
Chas. W. Weick	Foreman carpenter shop	950 00
William A. Knight	" machine shops	950 00
C. C. Sleffel	" forge room	380 00
F. W. Smyser	" "	480 00
J. E. Boyd	Assistant professor physics	1,200 00
Karl D. Swartzel	" mathematics	1,000 00
W. L. Graves	" rhetoric	900 00
Jas. S. Hine	Assistant in entomology	850 00
A. E. Vinson	" agricultural chemistry	800 00
E. M. Van Harlingen	Assistant professor anatomy and physiology	800 00

STATEMENT III — Continued.

Employes.	Position.	Salary.
H. J. Noyes	Assistant professor dairy husbandry	500 00
E. E. Somermeier	" in metallurgy and mineralogy	650 00
Arthur W. Hodgman	" professor classic languages	1,000 00
Frank Ruhlen	" in agriculture	720 00
J. A. Bownocker	" professor geology	900 00
W. H. Siebert	" professor history	1,200 00
C. L. Arnold	" in mathematics	1,000 00
C. A. Dye	" professor pharmacy	900 00
W. F. Lavery	" in veterinary medicine	600 00
E. E. Harold	Storekeeper	700 00
C. B. Frederick	Fellow in veterinary medicine	600 00
O. V. Brumley	" " "	200 00
Thos. K. Lewis	Assistant in drawing	600 00
M. P. Brush	" French	800 00
F. L. Landacre	" zoology	850 00
A. V. Bleininger	" ceramics	400 00
C. W. Foulk	" analytical chemistry	900 00
Harriet Townshend	" library	550 00
N. H. Brown	" physics	700 00
J. H. Schaffner	" botany	900 00
Horace Judd	Fellow in mechanical engineering	300 00
F. T. Hale	" " "	300 00
F. A. Fish	Fellow and laboratory assistant in electrical engineering	300 00
Robert Fischer	Fellow in chemistry	250 00
F. O. Clements	" "	250 00
Maud Jeffreys	Assistant in library	500 00
Gertrude Kellicott	" "	500 00
C. B. Guittard	" "	350 00
Lucy Allen	" "	400 00
F. K. Luke	Florist	480 00
C. P. Linhart	Director physical training	1,600 00
Perla G. Bowman	Associate professor domestic science	1,400 00
Sarah S. James	Assistant in domestic science	360 00
Cornelia P. Souther	" " "	320 00
J. R. Taylor	Assistant professor rhetoric	1,100 00
Clark Wissler	" in philosophy and pedagogy	800 00
Stella Elliott	Associate director physical training	750 00
M. Dresbach	Fellow in anatomy and physiology	300 00
Emma L. Ball	" mathematics	300 00
S. E. Rasor	" mathematics	300 00
A. H. McIntire	" industrial arts	300 00
J. F. Cunningham	Assistant in horticulture and forestry	540 00
W. H. Page	Professor of law	1,350 00
E. B. Kinkead	"	1,100 00
D. F. Pugh	"	700 00
E. O. Randall	"	700 00
G. W. Knight	"	250 00
F. F. D. Alberry	Lecturer on law	150 00
J. H. Collins	"	100 00
John A. Shauck	"	100 00
George W. Rightmire	Assistant in American history	200 00
Don C. Huddleson	" Gynasium	400 00
J. H. Vosskuehler	" Drawing	300 00
Oscar Erf	Student assistant in butter making	60 00
Marion Imes	" dairying	60 00
John B. Parker	Fellow in rhetoric	300 00
Benjamin F. Maag	Emerson McMillin fellow in astronomy	300 00
E. L. Fullmer	Fellow in botany	250 00
Alexis Cope	Secretary	2,250 00

STATEMENT III — Concluded.

Employes.	Position.	Salary.
Barnet	Accountant	780 00
Prentiss	Treasurer	400 00
Blackford	Executive clerk	650 00
D. Cockins	Registrar	700 00
McCracken	Chief engineer	1,500 00
Low	Assistant engineer	650 00
Standley	"	600 00
R. Rose	Plumber	780 00
artz	Watchman	540 00
Kelley	Lawnkeeper	420 00
E. R. Hubler	Telephone attendant	210 00
LeBay	Steam fitter	600 00
Townsel	Janitor	300 00
Goodspeed	"	480 00
Chantler	"	480 00
r Chantler	"	480 00
Brown	"	480 00
Cook	"	480 00
Geren	"	480 00
Whitestine	"	480 00
Denny	"	480 00
Bailey	"	150 00
McIntosh	"	100 00
amper		75 00
Weir	Elevator attendant	200 00
Mills	Curator of the archæological collection	300 00
McCall	Janitor	240 00
Stainbrooke	First fireman	450 00
Boude	Second fireman	360 00
n. Peck	Helper	400 00

COLUMBUS, OHIO, September, 21, 1899.

To the Board of Trustees of the Ohio State University:

The undersigned, the Finance Committee, have, in obedience to your instructions, examined the accounts and vouchers of F. W. Prentiss, the Treasurer of the University, for the period from July 1, 1898, to June 30, 1899, and carefully compared them with the vouchers in possession of the Secretary, and hereby certify that the report of the Treasurer submitted to the Board for the period named, which is the last fiscal year, is correct.

D. M. MASSIE,
PAUL JONES,
T. J. GODFREY,
Finance Committee.

Report of Treasurer of the Ohio State University to the Secretary of Agriculture and the Secretary of the Interior, of amount received under act of Congress of August 30, 1890, in aid of Colleges of Agriculture and the Mechanic Arts, and of the disbursements thereof, to and including June 30, 1899.

Balance on hand July 1, 1898	$267 42
Date of receipt of installment for 1898–'99, July 18, 1898....Amount..	24,000 00
Total available for year ended June 30, 1899	$24,267 42
Disbursements thereof for and during the year ended June 30, 1899:	
Agriculture, as per Schedule A	5,218 51
Mechanic Arts, as per Schedule B	8,062 83
English Language, as per Schedule C	754 29
Mathematical Science, as per Schedule D	1,555 71
Natural or Physical Science, as per Schedule E	7,976 33
Economic Science, as per Schedule F	662 44
Total expended during year	$24,230 11
Balance remaining unexpended July 1, 1899	37 31

I hereby certify that the above account is correct and true, and, together with the schedules hereunto attached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their application in the industries of life and to the facilities for such instruction.

F. W. PRENTISS,
Treasurer.

SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction, during the year ended June 30, 1899.

Name of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
Thos. F. Hunt, Professor	Agriculture	$250 00
W. D. Gibbs, Asso. Professor	"	140 00
Frank Ruhlen, Assistant	"	60 00
H. A. Weber, Professor	Agricultural chemistry	225 00
A. E. Vinson, Assistant	" "	80 00
W. R. Lazenby, Professor	Horticulture	225 00
J. F. Cunningham, Assistant	"	54 00
D. S. White, Professor	Veterinary Medicine	150 00
W. F. Lavery, Assistant	" "	60 00
C. B. Frederick, Assistant	" "	60 00
O. V. Brumley, Fellow	" "	20 00
H. P. Miller, Lecturer	Agriculture	20 00

SCHEDULE A — Concluded.

	Amount.
II. For facilities as follows:	
Text-books and reference books	$159 21
Department of Agriculture.	
Seeds, $18.75; model of barn, $6.00; tools and hardware, $86.17; threshing, $99.70; live stock, $140.00; harness, $48.00; feed, $573.98; farm implements, $177.28; scales, $88.98; machinery, $115.24; blacksmithing, $52.70; apparatus, $53.03	1,459 83
Dairy Laboratory.	
Ice, $5.05; milk, $277.72; dairy implements, $144.37; dairy supplies, $112.53; dairy machinery, $177...71; separator, $300.00; hollow-ware, $64.56; boiler, $430.00; ice machine, $324.79; Sterilizer, $24.00; Shaker, $25.00	1,885 73
Department of Agricultural Chemistry.	
Chemical apparatus and supplies, $57.32; steam table, $25.00	82 32
Department of Veterinary Medicine.	
Surgical instruments, $52.82; skeletons, $63.75; prints of animals, $3.12; mattress, $23.55; dissecting material, $27.81	171 05
Department of Horticulture.	
Laundry tub, $10.43; hardware and tools, $11.90; microscope, $94.04	116 37
Total	$5,218 51

SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for instruction, during the year ended June 30, 1899.

Name of instructors.	Subjects taught for which paid from "Morrill Fund."	Amo
I. For salaries of instructors:		
Edw. Orton, Jr., Director	Ceramics	$1
C. N. Brown, Professor	Civil engineering	2
C. C. Sherman, Assistant	"	1
J. N. Bradford, Asso. Professor	Drawing	1
T. E. French, Asst. Professor	"	1
T. K. Lewis, Assistant	"	
J. H. Vosskuehler, Fellow	"	
F. C. Caldwell, Asso. Professor	Electrical engineering	1
F. A. Fish, Fellow	" "	
F. E. Sanborn, Asso. Professor	Industrial arts	2
W. A. Knight, F'm'n Mch. Shop	" "	
C. W. Weick, F'm'n Carp. Shop	" "	
Chas. Sleffel Foreman	" "	
A. H. McIntire, Fellow	" "	
W. T. Magruder, Professor	Mechanical engineering	2
E. A. Hitchcock, Asst. Professor	" "	1
A. F. Hall, Machinist	" "	
F. J. Hale, Fellow	" "	
H. Judd, Fellow	" "	
N. W. Lord, Professor	Metallurgy and mineralogy	2
E. E. Somermeier, Assistant	" "	
F. A. Ray, Asso. Professor	Mine engineering	2
G. B. Kauffman, Professor	Pharmacy	2
C. A. Dye, Asst. Professor	"	

SCHEDULE B — Concluded.

	Amount.
II. Facilities as follows:	
Text-books and reference books	$598 68
Department of Ceramics.	
Machinery and apparatus, $406.05; clays, cements, etc., $46.46; hardware and castings, $63.00; canvas, $9.00; coal and coke, $97.94	622 45
Department of Civil Engineering.	
Transits, $232.25; electric lamp, $5.40	237 65
Department of Drawing.	
Photo supplies, $104.76; optical parts, $17.75; photo apparatus and instruments, $109.89	232 40
Department of Electrical Engineering.	
Machinery and repairs, $49.56; battery plates, $47.90; voltmeter, $87.50; ammeter, $11.25	196 21
Department of Industrial Arts.	
Machinery and apparatus, $107.65; shop supplies, $95.13; iron and steel, $161.76; lumber, $307.91; hardware and tools, $143.40	815 85
Department of Mechanical Engineering.	
Machinery and repairs, $390.21; econometer, $65.00; viscosimeter, $12.00; lathe, $295 20; tools and hardware, $160.70; machine parts and castings, $112.46; rope, $13.29; condenser, $400.00; frames, $1.75; calorimeter, $32.00; electric supplies, $1.76; separators, $28.00; pulleys, $17.14; lumber, $9.10; oil, $27.81, wire cloth, $6.40; iron and steel, $45.02; scales, $28.17; hangers, $18.29; counter, $16.00; indicator, $74.26	1,754 56
School of Mines.	
Gas, $6.80; apparatus, $33.75; coke, $16.00; fire clay, $35.05; assay furnace, $246.05; photographs of mines, $27.53	365 18
Department of Pharmacy.	
Laboratory desks	165 00
Common to Above Departments.	
Apparatus, etc	239 85
Total	$8,062 83

SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction, during the year ended June 30, 1899.

Names of instructors.	Subjects taught for wnich paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
A. C. Barrows, Professor.....	English literature	$225 00
J. V. Denney, Professor.....	" language & rhetoric	225 00
J. R. Taylor, Asst. Professor....	" " "	110 00
W. L. Graves, Asst. Professor...	" " "	90 00
J. B. Parker, Fellow.....	" " "	30 00

SCHEDULE C — Concluded.

	Amount.
II. For facilities as follows:	
Text-books and reference books	$74 29
Total	$754 29

SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction, during the year ended June 30, 1899.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
R. D. Bohannan, Professor.....	Mathematics	225 00
G. W. McCoard, Asso. Prof.....	"	160 00
C. L. Arnold, Asst. Professor...	"	100 00
K. D. Swartzel, Asst. Professor..	"	100 00
E. L. Ball, Fellow.....	"	30 00
S. E. Rasor, Fellow.....	"	30 00
H. C. Lord, Director Observatory	" and astronomy...	160 00

SCHEDULE D — Concluded.

	Amount.
II. For facilities as follows:	
Text-books and reference books	721 05
Department of Astronomy.	
Geisler tubes, $6.00; thermometer, $9.25; repairing instruments, $10.75; hardware and tools, $3.66	29 66
Total	$1,555 71

SCHEDULE E.

Disbursements for instruction in Natural or Physical Science and for facilities for such instruction, during the year ended June 30, 1899.

Names of instructors.	Subjects taught for which paid from "Morril Fund."	Amount.
I. For salaries of instructors:		
A. M. Bleile, Professor	Anatomy and physiology	$225 00
E. M. Van Harlingen, Assistant	" "	80 00
M. Dresbach, Fellow	" "	30 00
W. A. Kellerman, Professor	Botany	225 00
J. H. Schaffner, Assistant	"	90 00
E. L. Fullmer, Fellow	"	25 00
Wm. McPherson, Professor	Chemistry	225 00
L. A. Norton, Lecturer	"	120 00
C. W. Foulk, Assistant	"	90 00
Robert Fischer, Fellow	"	25 00
F. O. Clements, Fellow	"	25 00
Edw. Orton, Professor	Geology	225 00
J. A. Bownocker, Assistant	"	90 00
B. F. Thomas, Professor	Physics	225 00
J. E. Boyd, Assistant	"	120 00
N. H. Brown, Assistant	"	70 00
H. Osborne, Professor	Zoology and entomology	225 00
J. S. Hine, Assistant	" "	85 00
F. L. Landacre, Assistant	" "	85 00

SCHEDULE E — Concluded.

	Amount.
I. For facilities as follows:	
Text-books and reference books	$542 67
Department of Anatomy and Physiology.	
Optical parts, $45.06; laboratory supplies, $3.55; microscope, $120.80; model of eye, $19.00; apparatus, $1.15	189 56
Department of Botany.	
Lichens, $3.10; labels, $25.54; hardware and tools, $51.84; herbarium paper, $57.60; laboratory supplies, $8.00; optical parts, $6.15; mounting specimens, $70.05; microscope, $285.77; plants, $6.35; specimen cards, $9.50	523 90
Department of Chemistry.	
Apparatus and supplies, $244.71; laboratory desks, $427.38; steam table, $30.00; chemical glassware, $807.79	1,509 88
Department of Geology.	
Fossils, $32.70; specimens, $150.25	182 95
Department of Physics.	
Instruments, $52.00; apparatus, $118.45; electric supplies, $149.78	320 23
Department of Zoology and Entomology.	
Hardware and tools, $8.35; laboratory supplies, $54.54; microscope, $232.46; drugs and chemicals, $29.75; specimens, $18.50; instruments, $3.00; specimen boxes, $45.00; mounting hippopotamus, $140.00	531 60
Common to Above Departments.	
Chemicals and apparatus	1,890 54
Total	$7,976 33

SCHEDULE F.

Disbursements for instruction in Economic Science and for facilities for such instruction, during the year ended June 30, 1899.

Names of instructors.	Subjects taught for which paid from "Morrill Fund."	Amount.
I. For salaries of instructors:		
G. W. Knight, Professor.....	Americ'n history and political science	$250 00
F. C. Clark, Asso. Professor.....	Economics and sociology....	135 00
W. H. Siebert, Asso. Professor..	European history	120 00
G. W. Rightmire, Fellow.....	American history	20 00

SCHEDULE F — Concluded.

	Amount.
II.. For facilities as follows:	
Text-books and reference books	137 44
Total	$662 44

University Bulletins Series 4, Number 15

OHIO STATE UNIVERSITY

TWENTY-~~EIGHTH~~ ninth ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

TO THE

GOVERNOR OF OHIO

FOR THE

Year Ending June 30, 1899.

PART II.

The State has no material resources at all comparable with its citizens, and no hope of perpetuity except in the intelligence and integrity of its people.

COLUMBUS
PUBLISHED BY THE UNIVERSITY
JUNE, 1899.

Entered at the Postoffice at Columbus, Ohio, as Second-class Matter.

216652

CALENDAR

1899

JULY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
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AUGUST

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OCTOBER

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29	30	31				

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1900

JANUARY

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APRIL

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MAY

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JUNE

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24	25	26	27	28	29	30

DAYS AND DATES

1899

.ving Recess	Thursday,	November 30.
	Friday,	December 1.
n ends	Wednesday,	December 20.
Christmas Vacation.		

1900

erm begins	Wednesday,	January 3.
mester (College of Arts, Philosophy and ence) ends	Friday,	February 2.
Semester (College of. Arts, Philosophy and ence) begins	Monday,	February 5.
y Day	Thursday,	February 22.
'erm ends	Friday,	March 23.
:rm begins	Monday,	March 26.
Spring Recess.		
of Trustees	Wednesday,	April 4.
1ool Day	Friday,	May 18.
acation begins	Saturday,	May 19.
y—Athletic Association	Saturday,	May 19.
ive Drill, Cadet Battalion	Saturday,	May 26.
l Day	Wednesday,	May 30.
1minations (all Colleges)	Monday to Friday,	June 4. June 8.
'eate Sermon	Sunday,	June 10.
Examinations (8 A. M.)	Monday, Tuesday,	June 11. June 12.
	Monday,	June 11.
of Trustees	Tuesday,	June 12.
Day	Tuesday,	June 12.
CEMENT	Wednesday,	June 13.
Summer Vacation.		
Examinations (8 A. M.)	Monday,	September 17
ion	Tuesday,	September 18
and Class-work begin (all Colleges)	Wednesday,	September 19.
of Trustee s	Wednesday,	September 26

BOARD OF TRUSTEES

1898-1899

		Term Expires.
WM. I. CHAMBERLAIN	Hudson	May 13, 1899.
DAVID M. MASSIE	Chillicothe	" 1900.
JOHN T. MACK	Sandusky	" 1901.
LUCIUS B. WING	Newark	" 1902.
THOMAS J. GODFREY	Celina	" 1903.
J. McLAIN SMITH	Dayton	" 1904.
PAUL JONES	Columbus	" 1905.
OSCAR T. CORSON	Columbus	" 1906.

OFFICERS OF THE BOARD

*WM. I. CHAMBERLAIN	President.
J. McLAIN SMITH	Vice President.
ALEXIS COPE	Secretary.
FRED W. PRENTISS	Treasurer.

COMMITTEES OF THE BOARD

EXECUTIVE	FARM	FINANCE
L. B. WING	J. McLAIN SMITH	D. M. MASSIE
T. J. GODFREY	L. B. WING	T. J. GODFREY
PAUL JONES	JOHN T. MACK	J. McLAIN SMITH

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY	WM. I. CHAMBERLAIN	JOHN T. MACK

*Term expired May 13th.

THE FACULTIES

BOARD OF TRUSTEES

1898-1899

		Term Expires
WM. I. CHAMBERLAIN	Hudson	May 13, 1899
DAVID M. MASSIE	Chillicothe	" 1900
JOHN T. MACK	Sandusky	" 1901
LUCIUS B. WING	Newark	" 1902
THOMAS J. GODFREY	Celina	" 1903
J. McLAIN SMITH	Dayton	" 1904
PAUL JONES	Columbus	" 1905
OSCAR T. CORSON	Columbus	" 1906

OFFICERS OF THE BOARD

*WM. I. CHAMBERLAIN	President.
J. McLAIN SMITH	Vice President.
ALEXIS COPE	Secretary.
FRED W. PRENTISS	Treasurer.

COMMITTEES OF THE BOARD

EXECUTIVE	FARM	FINANCE
L. B. WING	J. McLAIN SMITH	D. M. MASSIE
T. J. GODFREY	L. B. WING	T. J. GODFREY
PAUL JONES	JOHN T. MACK	J. McLAIN SMITH

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY WM. I. CHAMBERLAIN JOHN T. MACK

* Term expired May 13th.

Members of the Faculties, and Other Instructors

1898-1899

JAMES HULME CANFIELD.....University Grounds

President

A. B., Williams, 1868; A. M., Williams, 1677; LL. D., Williams, 1898. Railroad construction, 1868-1872; Practicing Attorney, 1872-'77; Superintendent of Schools, St. Joseph, Michigan, 1874-'77; Professor of History and English Literature, State University of Kansas, 1877-'84; Professor of History and Political Science, State University of Kansas, 1884-'87; Professor of American History and Civics, State University of Kansas, 1887-'91; Chancellor of the University of Nebraska, 1891-'95; present position since 1895.

EDWARD ORTON.....100 Twentieth street

Professor of Geology, and State Geologist

A. B., Hamilton, 1848; Ph. D., Hamilton, 1875; LL. D., Ohio State University, 1881. Student of Theology, Lane Seminary, 1849; Student at Lawrence Scientific School, Harvard University, 1852; Student, Andover, 1854; Professor of Natural Science, State Normal School, Albany, N. Y., 1856-'59; Principal, Chester Academy, N. Y., 1859-'65; Professor of Natural History, Antioch, 1865-'72; President of Antioch, 1872-'73; President of the Ohio State University, 1873-'81; State Geologist, 1869; present position since 1881.

WILLIAM HENRY SCOTT.....131 Fifteenth avenue

Professor of Philosophy

A. B., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-'65; Pastor of Main Street M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

SIDNEY AUGUSTUS NORTON.....363 East Town street

Lecturer in Chemistry

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon, 1878; LL. D., Wooster, 1881. Student at Bonn, Leipsiz, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; present position since 1895.

NATHANIEL WRIGHT LORD.....338 West Eighth avenue

Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering

E. M., Columbia, 1876. Present position since 1878.

SAMUEL CARROLL DERBY.....93 Fifteenth avenue

Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Language, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

Members of the Faculties, and Other Instructors

1898-1899

JAMES HULME CANFIELD.....University Grounds

President

A. B., Williams, 1868; A. M., Williams, 1877; LL. D., Williams, 1898. Railroad construction, 1868-1872; Practicing Attorney, 1872-'77; Superintendent of Schools, St. Joseph, Michigan, 1874-'77; Professor of History and English Literature, State University of Kansas, 1877-'84; Professor of History and Political Science, State University of Kansas, 1884-'87; Professor of American History and Civics, State University of Kansas, 1887-'91; Chancellor of the University of Nebraska, 1891-'95; present position since 1895.

EDWARD ORTON.....100 Twentieth street

Professor of Geology, and State Geologist

A. B., Hamilton, 1848; Ph. D., Hamilton, 1875; LL. D., Ohio State University, 1881. Student of Theology, Lane Seminary, 1849; Student at Lawrence Scientific School, Harvard University, 1852; Student, Andover, 1854; Professor of Natural Science, State Normal School, Albany, N. Y., 1856-'59; Principal, Chester Academy, N. Y., 1859-'65; Professor of Natural History, Antioch, 1865-'72; President of Antioch, 1872-'73; President of the Ohio State University, 1873-'81; State Geologist, 1869; present position since 1881.

WILLIAM HENRY SCOTT.....131 Fifteenth avenue

Professor of Philosophy

A. B., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-'65; Pastor of Main Street M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

SIDNEY AUGUSTUS NORTON.....363 East Town street

Lecturer in Chemistry

A. B., Union, 1856; A. M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon, 1878; LL. D., Wooster, 1881. Student at Bonn, Leipsiz, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; present position since 1895.

NATHANIEL WRIGHT LORD.....338 West Eighth avenue

Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering

E. M., Columbia, 1876. Present position since 1878.

SAMUEL CARROLL DERBY.....93 Fifteenth avenue

Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Language, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

WILLIAM RANE LAZENBY.....307 West Sixth avenue

Professor of Horticulture and Forestry

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887. Instructor Horticulture and Botany, Cornell, 1874-'77; Assistant Professor of Horticulture, Cornell, 1877-'81; Lecturer, N. Y. State Grange, 1874-'81; Director Ohio U. S. Experiment Station, 1882-'84; Professor of Botany and Horticulture, Ohio State University, 1881-'92; present position since 1892.

JOSIAH RENICK SMITH.....960 Madison avenue

Professor of the Greek Language and Literature

A. B., Amherst, 1871; A. M., Amherst, 1883. Principal, Mound Street School, Columbus, 1871-'73; Teacher, Columbus High School, 1873-'76; Assistant Professor of Ancient Languages, Ohio State University, 1876-'81; Student at Leipsic, 1881-'83; present position since 1883.

HENRY ADAM WEBER.....1342 Forsythe avenue

Professor of Agricultural Chemistry

Graduate of Polytechnic School, Kaiserslautern, 1866; Student, Chemistry under Von Liebig and Reischner, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879; Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, Illinois State University, 1874-'82; present position since 1884.

BENJAMIN FRANKLIN THOMAS.....University Grounds

Professor of Physics, and State Sealer of Weigts and Measures

B. Sc., Ripon, 1874; M. Sc., Ripon, 1877; Ph. D., Stevens Institute, 1880. Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-'79; Professor of Physics, University of Missouri, 1880-'85; engaged in electrical test work at the International Electrical Exhibition at Philadelphia, 1884, and at the World's Columbian Exhibition, Chicago, 1893; present position since 1885.

GEORGE WELLS KNIGHT.....University Grounds

Professor of American History and Political Science and Constitutional Law; and in charge of European History

A. B., University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884. Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Student at Universities of Halle, Berlin, and Freiburg, 1889-'90; present position since 1887.

ROSSER DANIEL BOHANNAN.....Sixteenth and Indianola avenues

Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876. Student of Mathematics and Physics, Cambridge, England, 1880-'82; Göttingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emery and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant Professor in Mathematics and Physics, University of Virginia, 1884-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1895.

C. NEWTON BROWN.....1343 Forsythe avenue

Professor of Civil Engineering

C. E., Miami, 1886. Resident Engineer of the Ironton Extension of the Pittsburgh, Cincinnati, Chicago & St. Louis R. R., 1881; Ohio Geological Survey, 1882; Assistant in Mathematics and Civil Engineering, Ohio State University, 1883-'85; Associate Professor of Civil Engineering, Ohio State University, 1885-'90; present position since 1890.

ERNST AUGUST EGGERS.....190 West Eleventh avenue, University Grounds

Professor of Germanic Languages and Literatures

Student in Gymnasium at Hanover, the Sorbonne, College de France; at Michigan State Normal School. Instructor in German in the High Schools of Wisconsin and Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

ALBERT MARTIN BLEILE.....218 King avenue

Professor of Anatomy and Physiology

M. D., Starling Medical College, 1876. Student, Vienna, Chemistry and Physiology, 1876–'77; Student, Physiology, Leipsic, 1877–'78; Student Anatomy and Histology, Paris, 1878–'79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

WILLIAM ASHBROOK KELLERMAN.....175 Eleventh avenue

Professor of Botany

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881. Professor of Natural Science, Wisconsin State Normal School, 1874–'79; Professor of Botany and Horticulture, Kentucky State College, 1881–'82; Professor of Botany and Zoology, Kansas State Agricultural College, 1888–'87; Professor of Botany, Kansas State Agricultural College, 1888–'91; Botanist, Kansas State Board of Agriculture, 1888–'91; present position since 1891.

THOMAS FORSYTH HUNT.....188 West Tenth avenue

Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science

B. Sc., University of Illinois, 1884; M. Sc., University of Illinois, 1892. Assistant to Illinois State Entomolgist, 1885–'86; Assistant in Agriculture, University of Illinois, 1886–'88; Assistant Agriculturalist, Illinois Experiment Station, 1888–'91; Professor of Agriculture, Pennsylvania State College, 1891–'92; present position since 1892.

GEORGE BEECHER KAUFFMAN.....University Grounds

Professor of Pharmacy, and Dean of the College of Pharmacy

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio, 1894. Associate Professor of Pharmacy, Ohio State University, to 1894. Present position since 1894.

BENJAMIN LESTER BOWEN.....775 East Broad street

Professor of Romance Languages and Literatures

A. B., University of Rochester, 1881; Ph. D., Johns Hopkins University, 1888. Post-graduate work, University of Rochester, 1881–'82. Professor of Languages, New Windsor College, Maryland, 1881–'83; Graduate Student and Assistant in French, Johns Hopkins University, 1883–'86, and 1887–'88; Student at the Universities of Paris, Bonn, Rome and Madrid, 1885–'86, and 1886–'87; Professor of French and Latin, Bowdoin College, 1888–'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889–'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890–'94; present position since 1894.

JOSEPH VILLIERS DENNEY.....The Dennison

Professor of Rhetoric and the English Language, and Secretary of the University Faculty

A. B., University of Michigan, 1885. Journalist, 1885–'88; Principal of the Aurora (Illinois) High School, 1888–'90; Instructor in English and Graduate Student, University of Michigan, 1890–'91; Associate Professor of Rhetoric, Ohio State University, 1891–'94; present position since 1894.

ALLEN CAMPBELL BARROWS.....15th and Indianola avenues

Professor of English Literature, and Dean of the College of Arts, Philosophy and Science

A. B., Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889. Teacher, Latin and Greek, Phillips Academy, 1865–'66; Professor of Physics, Western Reserve, 1866–'70; Professor of Latin and English Literature, Western Reserve, 1870–'71; Professor of English Literature and History, Iowa Agricultural College, 1887–'94; present position since 1894.

EDWARD ORTON, JR.....The Normandie

Director of the Department of Clay-Working and Ceramics

E. M., Ohio State University, 1884. Assistant to Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885–'86; Superintendent of Bessie Furnace, 1887–'88; Chemist, Iron Works, Homestead, Pennsylvania, 1891; present position since 1894.

*JOHN THOMAS MARTIN.....1194 Fair avenue

Professor of Military Science and Tactics

Graduated from West Point, with rank of Second Lieutenant, U. S. Artillery, 1889. Promoted to Rank of First Lieutenant, 5th Artillery, U. S. A., 1896. Appointed to present position, Commandant of University Battalion, September, 1895.

ROBERT IRVING FULTON.....Delaware, Ohio

Professor of Elocution and Oratory

A. M., Ohio Wesleyan University, 1887. Law Student, University of Virginia, 1877; Superintendent Public Schools, Berlin, Ill., 1877–'78; Associate Principal, School of Oratory, Kansas City, Mo., 1878–'81, and Director of same, 1884–'92; Instructor, Elocution, Ohio Wesleyan, Missouri State, and Kentucky State Universities, 1882–'90; Assistant Professor, English Department, Kansas State University, 1890–'91; Professor of Elocution and Oratory, Ohio Wesleyan University, since 1891; Lecturer, Elocution and Oratory, Ohio State University, 1892–'95; present position since 1895.

WILLIAM FORREST HUNTER.....1032 Bryden Road; 18 Board of Trade

Dean of the College of Law, Professor of the Law of Sales, Bailments, Evidence, Mortgages, Wills Suretyship, Construction of Contracts, Law of Corporations, Judge of Moot Courts

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892–'96; present position since 1896.

WILLIAM THOMAS MAGRUDER.....329 West Eighth avenue

Professor of Mechanical Engineering

M. E., Stevens Institute of Technology, 1881. Student in Machine Design and Shop Practice, Taunton, Mass., 1881–'86, and in Chemistry and Mathematics, etc., Johns Hopkins University, 1886–'87; Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887–'96; present position since September, 1896.

J. P. GORDY.....The Normandie

Professor of Education

Ph. D., University of Leipsic, 1884; LL. D., Western University of Pennsylvania, 1897. Student in Philosophy at Leipsic, 1883–'84; Student in Philosophy at Johns Hopkins University, 1886; Assistant in Revision of Webster's Dictionary, 1884–'85; Professor of Philosophy and Pedagogy, Ohio University, Athens, 1886–'96; present position since September, 1896.

WILLIAM McPHERSON, JR.....97 Hamilton avenue

Professor of Chemistry

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State University, 1895. Instructor in Chemistry and Physics, Toledo High School, 1887–'89; Instructor in Chemistry, Toledo High School and Manual Training School, 1889–'92; Assistant in Chemistry, Ohio State University, 1892–'93; Assistant Professor in Chemistry, Ohio State University, 1893–'95; Associate Professor, General Chemistry, Ohio State University, 1895–'97; present position since 1897.

DAVID FRANKLIN PUGH.....1320 Highland street; Board of Trade

Professor of Equity Jurisprudence and Law of Real Property

Member of West Virginia Constitutional Convention, 1872; Member of Legislature, West Virginia, 1874–'75; Prosecuting Attorney, Tyler County, West Virginia, 1870–'80; Common Pleas Judge, Franklin County, Ohio, since 1887; present position since 1891.

EMILIUS OVIATT RANDALL.....1025 Oak street; Supreme Court Room

Professor of Agency, Commercial Law and Partnership

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892. Admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter Supreme Court of Ohio. Present position since 1893.

* Absent with his Battery since May, 1898. Lieut. Herbert A. White, U. S. A., 6th Cavalry, temporarily in charge.

EDGAR BENTON KINKEAD.....Wyandotte avenue; Board of Trade

Professor of Pleading and Probate Practice, Torts, Criminal Law, Ethics, Trial Practice and Law of Contracts (Engineers)

Assistant State Law Librarian, 1887-1894; Special Counsel for Attorney-General of Ohio, 1897-1900. Present position since 1895.

WILLIAM HERBERT PAGE.....The Vendome; 27 Board of Trade

Professor of Elementary Law, Contracts and Wills

B. A., Yale, 1889; LL. B., Ohio State University, 1892; LL. M., same institution, 1894. Instructor in Central High School, Columbus, Ohio, 1889-'96. Present position since September, 1896.

CHRISTOPHER P. LINHART.....The Great Southern; The Vendome

Director of the Gymnasium, and Instructor in Physical Education

M. D., Western Reserve University, Cleveland, 1882. Post-graduate student, same institution, 1882-'83. Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1883-'85; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86, and Assistant Visiting Physician Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark, (N. J.), Academy, 1887 and 1890, and Director of Physical Education, Newark, N. J., Public Schools, 1888-'90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-'97. Present position since 1897.

DAVID STUART WHITE.....West Fifth avenue

Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine

D. V. S., Ohio State University, 1890. Student, Royal Veterinary Schools of Hanover, Berlin and Dresden, 1890-'91; at Imperial Veterinary Institute of Vienna, 1891-'93; Assistant in Veterinary Medicine, Ohio State University, 1893. Present position since 1895.

HERBERT OSBORN.....357 West Seventh avenue

Professor of Zoology and Entomology

B. Sc., Iowa Agricultural College, 1879. M. Sc., same institution, 1880. Student of Entomology at Museum Comparative Zoology (Cambridge, Mass.) 1881-'82; College of Physicians and Surgeons, Des Moines, 1884-85 (Anatomy and Physiology); Zoological Station Naples (Smithsonian table), 1894-'95. Assistant in Zoology and Entomology, Iowa Agricultural College, 1880-'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884-'86. Professor and Entomologist, Iowa Agricultural College, 1887-'98; Special Agent Division Entomologist U. S. Department of Agriculture, 1885-'94. State Entomologist, Iowa, 1898.

FRANK EDWIN SANBORN.....380 West Eighth avenue

Director of the Department of Industrial Arts

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889. Assistant in Drawing, Massachusetts Institute of Technology, 1889-'90; Teacher in Manual High School Department, Pratt Institute, 1890-'91; Walker Special Instructor, Tufts College, 1891-'94; Instructor in Mechanical Department, Tufts College, 1894-'98. Present position since September, 1898.

JOSEPH NELSON BRADFORD.....54 West Tenth avenue

Professor of Drawing

M. E., Ohio State University, 1883. Draftsman, Ohio Geological Survey, 1882; Machinist and Draftsman, Pittsburg, Cincinnati & St. Louis Railroad, 1883-85; Assistant in Mechanical Engineering and Drawing, Ohio State University, 1885-'90; Assistant Professor of Drawing, Ohio State University, 1890-'93. Present position since 1893.

HENRY CURWEN LORD.....401 West Sixth avenue

Director of the Emerson McMillen Observatory, and Associate Professor of Astronomy

B. Sc., University of Wisconsin, 1889. Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891-'94; elected Fellow, Royal Astronomical Society, 1897. Present position since 1895.

FRANK ARNOLD RAY.....137 King avenue

Associate Professor of Mine Engineering

M. E., Ohio State University, 1887. Since then engaged in various lines of work coming within the range of Mine Engineering; Assistant Professor of Mine Engineering, Ohio State University, 1895-'96. Present position since 1896.

FRANCIS CARY CALDWELL.....380 West Eighth avenue

Associate Professor of Electrical Engineering

A. B., Cornell, 1890; M. E., Cornell, 1891. With Thompson-Houston Works, Lynn, Mass., 1891-'92; Student at the National Polytechnic, Zurich, 1892-'93; Assistant Professor of Physics, Ohio State University, 1893-'97. Present position since 1897.

PERLA G. BOWMAN.....The Dennison

Associate Professor of Domestic Science; in charge of the Department of Domestic Economy

Graduate of Toledo High School; Graduate of Toledo Manual Training School; Student at Wells College; Instructor in Toledo Manual Training School; Director of Domestic Science, Toledo Manual Training School; Special Student at Pratt Institute (Brooklyn), and the University of Michigan. Present position since September, 1897.

OLIVE B. JONES.....58 Eleventh avenue

Librarian

Assistant Librarian, 1887. Student, Library Science, Amherst, summer of 1892. Present position since 1893.

EMBURY ASBURY HITCHCOCK.....380 West Eighth avenue

Associate Professor of Experimental Engineering

M. E., Cornell, 1890. Straightline Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State University, 1893-'95; Assistant Professor, Experimental Engineering Ohio State University, 1895-'97. Present position since 1897.

FREDERICK CONVERSE CLARK.....Neil avenue

Associate Professor of Economics and Sociology

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891. Student at Halle and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Economy, Stanford University, 1892-'93; Assistant Professor of Economics and Sociology, Ohio State University, 1895-'98. Present position since 1898.

WILBUR HENRY SIEBERT.....1332 Highland street

Associate Professor of History

A. B., Ohio State University, 1888; A. B., (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890. Student, Freiburg and Berlin, 1890-'91; Student, Harvard, 1895; Assistant in History and Political Science, Ohio State University, 1891-'93; Assistant Professor of History, Ohio State University, 1893-'95, 1897-'98; Student, Harvard University, 1895-'97. Present position since 1898.

WILLIAM DAVID GIBBS.....319 West Fifth avenue

Associate Professor of Agriculture

B. Sc., University of Illinois, 1893. Fellowship in Agriculture, University of Illinois, 1893-'94; Post-graduate work, University of Illinois and University of Wisconsin, 1895; Expert Assistant in Division of Agricultural Soils of the United States Department of Agriculture, summer of 1895; Teacher of Bacteriology, University of Illinois, fall term, 1893; Assistant in Animal Husbandry, University of Illinois, winter term, 1894; Assistant in Agriculture, Ohio State University, spring and fall terms, 1895; Assistant Professor of Agriculture, 1895-'98. Present position since 1898.

STELLA M. ELLIOTT.....1457 Worthington street

Associate Director of the Gymnasium

Student, University of Nebraska, three years; Chautauqua School of Physical Education, summer of 1897; Assistant in Physical Training, University of Nebraska, two years; Y. M. C. A. classes in Physical Training, Lincoln, Nebraska, one year, and in Aurora, Illinois, one year; Assistant Director of Gymnasium, 1897-'98. Present position since 1898.

GEORGE WASHINGTON McCOARD.....Neil avenue

Assistant Professor of Mathematics

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882. Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873-'74; Private Tutor in Cleveland, Ohio, 1874-'80; Principal of Public Schools, Irving Park, Chicago, 1880-'81; Teacher of Latin and Mathematics, Columbus High School, 1881-'82; Assistant in Mathematics and Latin, Ohio State University, 1882-'87. Present position since 1887.

CHARLES WALTER MESLOH.....University Grounds

Assistant Professor of German

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895. Student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Assistant in German, Ohio State University, 1889-'95. Present position since 1895.

HERBERT JAMES NOYES.....Richland City, Wisconsin

Assistant Professor of Dairy Husbandry

President, National Butter and Cheese Makers' Association, 1891; Chief Instructor, Wisconsin Dairy School, 1892-'94; Instructor, Wisconsin Dairymen's Association, 1894. Present position since 1895.

JAMES STEWART HINE 248 West Fourth avenue

Assistant in Entomology

B. Sc. (H. and F.) Ohio State University, 1893. Student in Entomology, Cornell, 1895. Present position since 1895.

JAMES ELLSWORTH BOYD.....25 Maynard avenue

Assistant Professor of Physics

B. Sc., Ohio State University, 1891; M. Sc., Cornell, 1896. Student in Physics and Mathematics, Ohio State University, 1893-'95; Student in Experimental and Theoretical Physics, Cornell, 1895-'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1895. Assistant in Physics, Ohio State University, 1891-'95; held scholarship in Physics, Cornell, 1895. Present position since September, 1896.

JOSEPH RUSSELL TAYLOR.....86 King avenue

Assistant Professor of Rhetoric

B. A., Ohio State University, 1887; M. A., Columbia, 1897. Taught in Township Schools, Madison County, Ohio, 1887-'88; Assistant in Drawing, Ohio State University, 1889-'94; Student, English, Columbia, 1896-'97; Assistant in Rhetoric, Ohio State University, 1894-'97. Present position since 1897.

CHRISTOPHER ELIAS SHERMAN.....772 Oak street

Assistant Professor of Civil Engineering

C. E., Ohio State University, 1894. Engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years, during college course; also engaged in railroad, geological and governmental engineering work. Present position since September, 1896.

WILLIAM LUCIUS GRAVES.....1313 Forsythe avenue

Assistant Professor of Rhetoric

B. A., Ohio State University, 1893; M. A., Ohio State University, 1897. Principal High School, Coshocton, 1894-'95; Fellow and Assistant in Rhetoric and English Language, Ohio State University, 1895-'96. Present position since 1896.

ARTHUR WINFRED HODGMAN.....164 West Ninth avenue

Assistant Professor of the Classic Languages

A. B., Harvard, 1890; A. M., Harvard, 1893; Ph. D. (Classical Philology) Harvard, 1896. Student in Graduate School, Harvard, Classical Philology, 1892-'96. Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1896-'97. Present position since September, 1897.

CLAIR ALBERT DYE.....169 King avenue

Assistant Professor of Pharmacy

G. Ph., Ohio State University, 1891. Post-graduate student in Chemistry and Pharmacy, Ohio State University; Assistant in Chemistry and Pharmacy, 1890-'94; Assistant in Pharmacy, 1894-'98. Present position since 1898.

THOMAS EWING FRENCH.....435 East Naghten street

Assistant Professor of Drawing

M. E., Ohio State University, 1895. Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Vaile Company, Dayton, 1888-'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888-'91; Chief Draftsman, The Smith-Vaile Company, Dayton, 1891; Assistant in Drawing, 1891-'98. Present position sinc 1898.

CHARLES WILLIAM FOULK.....41 Eleventh avenue

Assistant Professor of Analytical Chemistry

B. A., Ohio State University, 1894. Assistant in General Chemistry, 1896-'98. Present position since September, 1898.

JOHN ADAMS BOWNOCKER.....1594 Neil avenue

Assistant Professor of Geology

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897. Principal of High School, Martin's Ferry, 1889-'92; Fellow in Geology, University of Chicago, 1892-'94; Graduate Scholar, Yale University, 1894-'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1893; Assistant in Geology, 1895-'98. Present position since 1898.

EDWARD M. VAN HARLINGEN.....1594 Neil avenue

Assistant Professor of Anatomy and Physiology

B. Sc., Ohio State University, 1883; M. Sc., Ohio State University, 1897. Graduate Student Ohio State University, 1896-'97; Assistant in Anatomy and Physiology, 1897-'98. Present position since 1898.

FAXON FRANKLIN DUANE ALBERY.....37 Lexington avenue; 119½ South High street

Lecturer on the Law of Insurance

Student of Law and Philosophy in the University of Berlin and the University of Leipsic. Present position since September, 1896.

JAMES HENRY COLLINS.....57 Lexington avenue; Ruggery Building

Lecturer on Federal Practice

In practice for thirty years. Present position since 1891.

JOHN ALLEN SHAUCK.....95 Winner avenue; Supreme Court Room

Lecturer on Supreme Court Practice and Special Cases

B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M., Otterbein University, 1870; LL. D., Otterbein University, 1897. Judge of the Supreme Court of Ohio.

CHARLES LINCOLN ARNOLD.....328 West Eighth avenue

Assistant in Mathematics

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894. Post-graduate Student, University of Chicago and Ohio State University, 1894-'95. Present position since 1890.

CHARLES WILLIAM WEICK.....51 East Eighth avenue

Assistant in the Industrial Arts and Instructor in Pattern Making and Founding

B. Sc., Industrial Arts, Ohio State University, 1898. Student, Cornell University, summer of 1898; Foreman in pattern shops Buffalo Forge Co., Buffalo, N. Y., 1881-'88; Johnson Steel Co., Johnstown, Pa., 1888-'89; Draftsman Buffalo Forge Co., Buffalo, N. Y., 1889-'92; Chief Draftsman and Designer, Horner Machine Co., Holyoke, Mass., 1892-'93. Present position since 1893.

WILLIAM ABNER KNIGHT.....206 West Lane avenue

Assistant in the Industrial Arts and Instructor in Machine Work

Present position since 1898.

KARL DALE SWARTZEL.....57 East Eighth avenue

Assistant in Mathematics

B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894. Fellow and Assistant in Mathematics, Ohio State University, 1894–'95. Present position since 1895.

THOMAS KENYON LEWIS.....68 East Seventh avenue

Assistant in Drawing

B. Sc., Ohio State University, 1894. Graduate Student, Ohio State University, 1894–'95. Summer of 1897 and summer of 1898 at Cincinnati Art Academy. Present position since graduation.

*CHARLES A. BRUCE.....234 West Tenth avenue

Assistant in French

B. A., Ohio State University, 1895. Student of French, Amherst, 1895. Present position since graduation.

FRANCIS LEROY LANDACRE.....70 West Tenth avenue

Assistant in Zoology

B. A., Ohio State University, 1895. Present position since graduation.

WILLIAM FINLEY LAVERY.....North Dormitory

Assistant in Veterinary Medicine

D. V. M., Ohio State University, 1890. Veterinary practitioner, 1892–'96. Present position since 1896.

†CHARLES CONRAD SLEFFEL.....174 West First avenue

Assistant in Industrial Department and Forgemaster

Sixteen years' experience in work-shops. Present position since September, 1896.

ALBERT EARL VINSON.....184 West Ninth avenue

Assistant in Agricultural Chemistry

Instructor in Chemistry, Y. M. C. A., Dayton, Ohio, 1895. Present position since September, 1896.

*FREDERICK EDWARD KESTER.....1473 Neil avenue

Assistant in Physics

M. E. (in E. E.), Ohio State University, 1895. Fellow in Physics, Ohio State University, 1895–'97. Present position since 1897.

JOHN H. SCHAFFNER.....79 East Third avenue

Assistant in Botany

A. B., Baker University, Kansas, 1893. A. M., University of Michigan, 1894; M. S., Baker University, 1896. Student in Botany, Zoology and Geology, University of Michigan, 1893–'95. Student in Botany and Paleo-Botany, University of Chicago, 1896–'97. Assistant in Botany, University of Michigan, 1894–'95. Professor of Natural Sciences, University of South Dakota, 1895–'96.

CLARK WISSLER.....56 East Fifth avenue

Assistant in Philosophy and Pedagogy

B. A., Indiana University, 1897. Assistant in Philosophy, Indiana University, 1895–'97.

* Absent on leave.

† Resigned December, 1898.

JOHN FERGUSON CUNNINGHAM.....1462 Worthington street

Assistant in Horticulture and Forestry

B. Sc., (in Horticulture) 1897, Ohio State University. Fellow and Laboratory Assistant in Horticulture and Forestry, 1897–'98.

CHARLES BYRON FREDERICKS.....Veterinary Hospital

Assistant in Veterinary Medicine

V. M. and S., Ontario Veterinary College, 1898. In practice since graduation. Fellow in Veterinary Medicine, 1897–'98.

*HARRY WALDO KUHN.....221 West Eleventh avenue

Assistant in Mathematics

B. Sc., Ohio State University, 1897. Fellow and Assistant in Mathematics, 1897–'98.

†RAYMOND MOLLYNEAUX HUGHES.....

Assistant Director of the Department of Clay-working and Ceramics

B. A., Miami, 1898. Student of Chemistry, Chicago University, 1894; Student of Chemistry, Miami, 1894–'95; Teacher of Chemistry and Physics, High School, Hamilton, Ohio, 1898–'95; Student in Chemistry at Massachusetts Institute of Technology, 1897–'98.

MURRAY P. BRUSH.....532 East Broad street

Assistant in Romance Languages

A. B., Princeton, 1894; Ph. D., Johns Hopkins, 1898. Student, French Language and Literature in Paris, winter of 1895–'96, attending lectures at Sorbonne, College de France, and Ecole des Hautes-Etudes; Romance Department of Johns Hopkins, 1894–'95 and 1896–'97. Summer of 1897 in Libraries of Italy.

FRANK RUHLEN.....1568 Neil avenue

Assistant in Agriculture

B. Sc., (Agr.) Ohio State University, 1896.

‡SARAH STUBBS JAMES.....

Assistant in Domestic Economy and Instructor in Domestic Art

Student in University of Cincinnati, 1892–'93. Student in Miami University, Oxford, O., 1887–'88. Student in Institute of Technology, Boston, Mass., 1896–'97. Student in Columbia University, 1897–'98. Teacher in the Public Schools of Cincinnati, 1875–'79, and in Woodward High School, Cincinnati, O., 1879–'84.

ALBERT V. BLEININGER.....North Dormitory

Assistant Director of the Department of Clay Working and Ceramics

Present position since 1898.

NEWTON HENRY BROWN.....1609 North High street

Assistant in Physics

M. E. (in E. E.), Ohio State University, 1893; M. A., Cornell University, 1898; Student, Assistant in Physics, 1892–'93; Assistant in Physics, Ohio State University, 1893–'96. Present position since September, 1898.

GEORGE WASHINGTON RIGHTMIRE.....1404 Summit street

Assistant in American History

B. Ph., Ohio State University, 1895; M. A., 1898. Teacher in Columbus High School. Present position since 1898.

EDWARD EVERETT SOMMERMEIR.....113 West Frambes avenue

Assistant in Metallurgy and Mineralogy

G. Ph., Ohio State University, 1898. Student Laboratory Assistant in Chemistry, 1897–'98. Present position since September, 1898.

* Absent on leave.

† Resigned September, 1898.

‡ Resigned February, 1899.

DON CARLOS HUDDLESON.....249 West Lane avenue

Assistant in Gymnasium

G. Ph., Ohio State University, 1897. Medical Student, 1897. Summer School of Physical Training Chautauqua, 1898. Present position since 1898.

BURT BIDWELL HERRICK.....

Instructor in Cheese Making

ELISHA SMITH

Assistant in Cheese Making

CORNELIA PORTER SOUTHER.....The Dennison

Assistant Professor of Domestic Art

Graduate of Mary Institute (Washington University), St. Louis, Mo., 1883. Graduate Student Mary Institute, 1883–'85. Handarbeitslehrerin, Seminar des Carola-Vereins, Leipsic, 1896–'97. Investigations in Domestic Art Methods in foreign cities, 1896–'98. Teacher of Sewing, Mrs. Ball's Private School, St. Louis, 1898. Present position since February, 1899.

FREDERICK WILLIAM SMYSER.....Seventh avenue

Assistant in the Industrial Department and Forge-master

S. B., Massachusetts Institute of Technology, 1896. Instructor in Mechanical Drawing on the Massachusetts Nautical Training Ship "Enterprise," 1896–'97. Present position since January, 1899.

JOSEPH HENRY VOSSKUEHLER.....

Assistant in Drawing

Designer, Gross Lithographing Co., Dayton, Ohio, 1889–'90; Draftsman, The Stilwell-Bierce and Smith-Vaile Co., Dayton, 1890–'96; Finckel & Finckel, Patent Attorneys, Columbus, 1897. Present position since September, 1898.

ROBERT FISHER.....810 Franklin avenue

Fellow, and Laboratory Assistant in Chemistry

G. Ph., 1895, M. Ph., 1896, Ohio State University. Special Student in Chemistry, same institution, 1896–'97.

HORACE JUDD.....22 West Woodruff avenue

Fellow, and Laboratory Assistant in Mechanical Engineering

M. E., 1897, Ohio State University.

FRANK ORVILLE CLEMENTS.....

Fellow, and Laboratory Assistant in Chemistry

MELVIN DRESBACH.....236 West Eighth avenue

Fellow, in Anatomy and Physiology

B. Sc., 1897, Ohio State University.

WILLIAM C. MILLS.....91 West Frambes avenue

Curator of Archæology

B. Sc. (H. and F.), Ohio State University, 1898.

FREDERICK T. HALE.....239 West Tenth avenue

Fellow, and Laboratory Assistant in Mechanical Engineering

M. E., Ohio State University, 1898.

JOHN BERNARD PARKER.....43 West Woodruff avenue

Fellow, and Assistant in Rhetoric

B. A., Ohio State University, 1898. Present position since September, 1898.

FRED ALAN FISH.....239 West Eleventh avenue

Fellow, and Laboratory Assistant in Electrical Engineering

M. E. (in E. E.), Ohio State University, 1898.

EMMA LEANNA BALL.....225 King avenue

Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1895; M. Sc., same institution, 1896.

ALFRED HEBER McINTIRE.....240 West Eighth avenue

Fellow in Industrial Arts

M. E. (in E. E.), Ohio State University, 1898.

SAMUEL EUGENE RASOR.....22 West Woodruff avenue

Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1898. Present position since September, 1898.

OLIVER V. BRUMLEY.....

Fellow, and Assistant in Veterinary Medicine

Veterinary Surgeon's certificate, Ohio State University, 1897. Practiced 1897–'98.

BENJAMIN MAAG.....164 West Ninth avenue

Emerson McMillen Fellow, and Assistant in Astronomy

Ph. B., Wooster University, 1898.

EDWARD L. FULLMER.....420 West Eighth avenue

Fellow in Botany

HARRIET TOWNSHEND.....53 West Eleventh avenue

Library Assistant

Present position since September, 1895.

MAUD DOROTHY JEFFREY.....65 West Eleventh avenue

Library Assistant

B. Ph., Ohio State University, 1895. Student of Library Science, Ohio State University, 1895–'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

GERTRUDE STOWELL KELLICOTT.....1332 Highland street

Library Assistant

Student, Ohio State University, 1888–'95. Student of Library Science, Ohio State University, 1895–'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

LUCY ALLEN.....1490 Neil avenue

Library Assistant

B. A., Ohio State University, 1897. Student in Library Science under Dr. G. E. Wire, summer of 1898 at Ohio State University. Present position since September, 1898.

CLAUD B. GUITTARD.....80 McMillen avenue

Library Assistant

CHANGES, 1899-1900

WITHDRAWN

President James H. Canfield, Professor Robert I. Fulton, Assistant Professor Edward Van Harlingen, Assistant Director of Ceramics Raymond M. Hughes, Assistant Charles C. Sleffel, Assistant Murray P. Brush, Assistant Harry W. Kuhn, Assistant Sarah S. James, Assistant Newton H. Brown, Assistant Elisha Smith, Assistant Frederick W. Smyser, Assistant Charles W. Weick, Fellow and Assistant Samuel E. Rasor, Fellow and Laboratory Assistant Robert Fisher, Fellow and Laboratory Assistant Frank O. Clements.

APPOINTMENTS

REV. WILLIAM OXLEY THOMPSON, D. D.....University Grounds

President

CHARLES SMITH PROSSER.....

Associate Professor of Historical Geology

B. S., Cornell University, 1883; M. S., Cornell University, 1886. Instructor in Paleontology, Cornell University, 1885-'88; Assistant Paleontologist, U. S. Geological Survey, 1888-'92; Professor of Natural History, Washburn College, Topeka, Kansas, 1892-'94; Professor of Geology, Union College, Schenectady, N. Y., 1894-'99. Present position since 1899.

CHARLES BRADFIELD MORREY.....

Assistant Professor of Anatomy and Physiology

B. A., Ohio State University, 1890; Post-graduate Student, Ohio State University, 1890-'91; M. D., Starling Medical College, 1896. Assistant in Latin, Ohio State University, 1890-'92; Assistant in Physiology, Ohio State University, 1892-'95; Student in Vienna and Paris, 1897-'99. Present position since 1899.

WILLIAM EDWARDS HENDERSON.....

Assistant Professor of Analytical Chemistry

A. B., University of Wooster, 1891; M. A., 1894; Ph. D., Johns Hopkins University, 1897. Graduate Student Johns Hopkins University, 1893-'97. Fellow in Chemistry, Johns Hopkins University, 1896-'97. Professor of Natural Sciences, College of Emporia, Kansas, 1891-'98. Professor of Chemistry, Ohio University, 1897-'99. Present position since 1899.

EDWIN D. SHURTER, A. M.....

Assistant Professor of Rhetoric and Public Speaking

GEORGE H. McKNIGHT, PH. D.....

Assistant Professor of Rhetoric and English Language

JOHN B. SANBORN.....

Assistant in American History

A. B., University of Wisconsin, 1896; A. M., University of Wisconsin, 1897; Ph. D., University of Wisconsin, 1899. Graduate Student University of Wisconsin, 1896-'99. Scholar and Assistant in American History, University of Wisconsin, 1898-'99.

SILAS MARTIN.....1269 Dennison avenue

Assistant in Drawing

DONALD ALEXIS KOHR.....

Fellow, and Laboratory Assistant in Chemistry

B. Ph., Ohio State University, 1898. Graduate Student in Chemistry and Mathematics, 1898-'99. Laboratory Assistant in Chemistry, 1898-'99.

S. W. COLLETT, M. Sc.....

Fellow in Botany

JOHN WESLEY YOUNG.....888 East Main street

Fellow, and Assistant in Mathematics

B. Ph., Ohio State University, 1899.

DAVID T. KEATING, B. PH.....1817 East Broad street

Fellow in Philosophy

CHANGES IN TITLES

GEORGE W. McCOARD,	Assistant Professor of Mathematics Associate Professor of Mathematics
CHARLES WALTER MESLOH,	Assistant Professor of German Associate Professor of Germanic Languages
ARTHUR WINFRED HODGMAN,	Assistant Professor of the Classic Languages Associate Professor of the Classic Languages
JOSEPH RUSSELL TAYLOR,	Assistant Professor of Rhetoric Assistant Professor of English Literature
JOHN ADAMS BOWNOCKER,	Assistant Professor of Geology Associate Professor of Inorganic Geology
CHARLES A. BRUCE,	Assistant in French Assistant Professor of the Romance Languages
CHARLES LINCOLN ARNOLD,	Assistant in Mathematics Assistant Professor of Mathematics
KARL D. SWARTZEL,	Assistant in Mathematics Assistant Professor of Mathematics
JOHN H. SCHAFFNER,	Assistant in Botany Assistant Professor of Botany
FRED. ALAN FISH,	Fellow and Laboratory Assistant in Electrical Engin Assistant in Electrical Engineering
OLIVER V. BRUMLEY,	Fellow and Assistant in Veterinary Medicine Assistant in Veterinary Medicine

EXECUTIVE DEPARTMENT

1898-'99

JAMES H. CANFIELD.....President
ALEXIS COPE.....Secretary Board of Trustees and Bursar
W. C. McCRACKEN.....Chief Engineer
JEAN BLACKFORD.....Executive Clerk
EDITH D. COCKINS.....Registrar
C. E. BARNET.....Accountant
CHARLES LOWE.....Assistant Engineer
THOMAS BOUDE.....First Fireman
W. E. CASE.....Second Fireman
JAMES KELLEY.....Lawnkeeper
HENRY MARTZ.....Watchman

JANITORS

ARTHUR CHANTLER.....University Hall
HENRY CHANTLER.....Orton Hall
J. F. LONGMAN.....Chemical Hall
JOHN H. BROWN.....Hayes Hall
JOHN CONRAD.....Horticultural Hall and Veterinary Hospital
D. D. GEREN.....Gymnasium
WILLIAM WHITESTINE.....Biological Hall
M. N. COOK.....Townshend Hall

UNIVERSITY ADDRESSES

June 11th.....Baccalaureate Sermon, "Things Fundamental to Civilization"
REV. HENRY W. HULBERT, Junior Pastor "The Old Stone Church," Cleveland, O.

June 14th.....Commencement Address, "Real Life"
PROFESSOR J. WILLIS GLEED, M. A., Topeka, Kansas

FACULTY LECTURE COURSE

January 7th....."Rise and Fall of Spanish Power"
PROFESSOR EDWIN E. SPARKS, University of Chicago

January 16th....."The Jew in History"
RABBI DAVID KLEIN, Columbus

January 23rd....."The Real, the Ideal, and the Romantic"
PROFESSOR ALLEN C. BARROWS, Columbus

January 30th....."The Ethics of the Spanish-American War"
DR. WILLIAM H. SCOTT, Columbus

February 20th....."Coal and How We Get It"
PROFESSOR FRANK A. RAY, Columbus

February 27th....."Deformities"
DR. C. P. LINHART, Columbus

March 6th....."Nature's Method of Distributing Plants"
PROFESSOR WILLIAM R. LAZENBY, Columbus

March 13th....."Expression an Important Factor in College Education"
PROFESSOR ROBERT I. FULTON, Delaware

DEPARTMENT LECTURES

AMERICAN HISTORY AND POLITICAL SCIENCE

April 25th....."The Work of the Ohio Municipal Code Commission"
HON. EDWARD KIBLER, Newark, O.

May 2d....."The Merit System and National Politics in Municipal Affairs"
HON. D. F. PUGH, Columbus

ECONOMICS

October 6, 1898....."The General Office"
J. T. BROOKS, Pittsburgh,
Second Vice-President, Pennsylvania System

November 16, 1898....."Crisis of '98 in India"
IRA A. RICHARDS, Ex-Missionary to Southern India

December 13, 1898....."Railway Promoting"
F. L. PATRICK,
President, Indianapolis & Southern R. R.

January 12, 1899.....“The Office of Railroad Commissioner”
R. S. KAYLER, Columbus,
Commissioner of Railroads and Telegraphs

January 17, 1899.....“The Express Business”
J. T. CLARK, Columbus,
General Agent, American Express Co.

January 24, 1899.....“Operation of Street Railways”
W. F. KELLY, Columbus,
General Superintendent, Columbus Street Railway Co.

February 1, 1899.....“Pluck — The Essential Factor of Success”
W. I. CHAMBERLAIN,
Associate Editor “Ohio Farmer,” President Board of Trustees, O. S. U.

February 28, 1899.....“Bonded Indebtedness of Ohio State University”
ALEXIS COPE,
Secretary, Board of Trustees, O. S. U.

March 18, 1899.....“Practical Hints on the Labor Problem”
JAMES KILBOURNE, Columbus,
President, Kilbourne & Jacobs Manufacturing Co.

March 21, 1899.....“Relation of the Employe to the Company”
E. E. CLARK, Cedar Rapids, Iowa,
Grand Chief, Order of Railway Conductors

April 4, 1899.....“Life Insurance”
HENRY BOHL, Columbus,
Superintendent of Agencies, Prudential Insurance Co.

April 11, 1899.....“Building and Loan Associations”
L. L. RANKIN, Columbus,
Attorney, Buckeye State Building and Loan Association

April 18, 1899.....“The State’s Relation to Corporations”
FRANK S. MONNETT,
Attorney-General

April 18, 1899.....“The Credit Men’s Association of America”
JOSEPH A. JEFFREY, Columbus,
President, The Jeffrey Manufacturing Co.

April 23, 25, 1899.....“The Man Who Works”
WASHINGTON GLADDEN, Columbus,
Pastor, First Congregational Church

May 2, 1899.....“Fire Insurance”
CYRUS WOODBURY, Columbus,
Special Agent and Adjuster, Queen Insurance Co.

May 9, 1899.....“A, B, C, of Insurance”
LEE DURSTINE,
General Agent, New York Life Insurance Co.

May 10, 1899.....“Board of Trade”
J. W. HOWARD,
Assistant Secretary, Columbus Board of Trade

May 16, 1899.....“Municipal Indebtedness”
W. F. BURDELL, Columbus,
Member, Board of Sinking Fund Commissioners

LECTURES BEFORE SOCIETIES

ENGINEERS

February 24, 1899....."The Work of the Massachusetts Highways Commission"
DR. T. C. MENDENHALL, Worcester, Mass.

April 15, 1899....."The Effect of Mechanical Draft on the Ultimate Efficiency of Steam Boilers"
WALTER B. SNOW, Boston, Mass.

OHIO STATE ARCHÆOLOGICAL AND HISTORICAL SOCIETY

April, 1899....."Indian Trails of Ohio"
ARCHER B. HULBERT, Hudson

THE UNIVERSITY

OHIO STATE UNIVERSITY

THE UNIVERSITY AND THE STATE.

Under an act of Congress passed July 2, 1862, the State of Ohio received from the United States a large grant of the public lands for the purpose of establishing a "college where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." In accordance with this act, the Ohio State University was founded by the State as a public institution of learning. The governing body of the institution is a Board of Trustees, appointed by the Governor of the State for terms of seven years as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by special appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the Legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture, engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

THE STATE SYSTEM OF EDUCATION

A State system of free, public education, worthy of the name, freely offers every opportunity and inducement to its entire school population to pass by systematic methods, easily apprehended by those who are to receive the benefits, in schools under popular control, from the lowest seat in the primary school to graduation by a university of high standing. It is not supposed that all pupils can or will accept these opportunities or respond to these inducements. But the highest welfare of the State demands that both opportunity and inducement shall be continually present, and that the broad and firm highway of sound training and of higher learning shall be opened freely to every child of the State.

The State system is naturally divided into three great sections. The first includes the rural or district schools, and the work done in the first eight grades of the city schools. To this is generally given the name of "the Grades." The second division includes the High Schools. The work of the third division is done by the University.

THE UNIVERSITY

This means that the University is practically the thirteenth, fourteenth, fifteenth and sixteenth grades of this State system of free public education. Its work is related to that of the High Schools precisely as their work is related to that of "the Grades." It ought to be quite as natural for a pupil to look forward from the High School to work in the University, or its equivalent, as to look forward from "the Grades" or the Rural Schools to work in the High Schools.*

ORGANIZATION OF THE UNIVERSITY

The Ohio State University is divided into six colleges, as follows:

The College of Agriculture and Domestic Science consists of those departments represented in the course leading to the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Horticulture and Forestry and Bachelor of Science in Domestic Economy; in the Short Course in Agriculture, in the Short Course in Domestic Economy, and in the Course in Dairying.

The College of Arts, Philosophy and Science consists of those departments represented in the courses leading to the degrees of Bachelor of Arts, Bachelor of Philosophy, and Bachelor of Science; and in the Courses Preparatory to Law and to Journalism, and to Medicine.

The College of Engineering consists of those departments represented in the courses leading to the degrees of Civil Engineer, Engineer of Mines, Engineer of Mines in Ceramics, Mechanical Engineer, Mechanical Engineer in Electrical Engineering, and Bachelor of Science in Industrial Arts, Bachelor of Science in Chemistry or in Metallurgy; in the Course in Architecture, in the Short Course in Clay-working and Ceramics, and in the Short Course in Mining.

The College of Law consists of those departments represented in the course leading to the degree of Bachelor of Laws.

The College of Pharmacy consists of those departments represented in the courses leading to the degree of Bachelor of Science in Pharmacy, and in the Short Course in Pharmacy.

The College of Veterinary Medicine consists of those departments represented in the course leading to the degree of Doctor of Veterinary Medicine, and to a certificate of Veterinary Surgeon.

Each college is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of students in that college.

LOCATION OF THE UNIVERSITY

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and thirty acres, bounded east and west by High street and the Olentangy river, respectively. The western portion, about 200 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science. The eastern portion is occupied by the principal University buildings, campus, athletic and drill grounds, a park-like meadow, and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower

*Of course this does not mean that there will be but one institution of the College or University grade in the state; but that there will be at least one such institution in the state, which shall be recognized as belonging to the state system of public education and as the natural and logical head of that system.

beds; and are so managed as to illustrate the instruction in Botany, Horticulture, Forestry, Landscape Gardening and Floriculture.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds, or the Athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townsend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

BUILDINGS

UNIVERSITY HALL contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y. M. C. A. and King's Daughters' room, the Young Woman's League room and class rooms and laboratories for the departments of Economics, English Literature, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy, Physics, Rhetoric and English Language, and Romance Languages. An electric passenger elevator connects all floors.

MECHANICAL HALL contains a room fitted up with cases for the care of models, instruments of precision, etc.; a room for instruction in laboratory mechanics and draughting, and laboratories with the engines, hydraulic plant, testing machines, etc.

BOTANICAL HALL has on the first floor the lecture room of the department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

ELECTRICAL HALL devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

CHEMICAL HALL is now occupied by the departments of Chemistry, Mining and Metallurgy and Pharmacy. The Department of Chemistry occupies the middle portion of the first floor and the middle and western portion of the second floor. The main lecture room has a seating capacity for one hundred and fifty students. The laboratory for introductory work and qualitation analysis has accommodation for two hundred and sixty-four students. There is also a special laboratory for qualitative analysis with accommodations for twenty-five students. The main quantitative laboratory accomodates fifty students. There is also an organic laboratory, a room for the preparation of experiments, a balcony accessible both from the lecture room and preparation room, a room for combustion work, a dark room for spectroscopic work, in addition to a number of smaller rooms used for private laboratories.

The departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity of forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accomodation of the large geological collection of the University and for work and instruction in the department of Geology. A portion of it is occupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professor's private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accomodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Cerámics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The department of Drawing occupies the third floor for instruction in mechanical and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

THE EMERSON MCMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced."

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays; a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmüller; a sidereal clock by Clemens Riefler of Munich; a comparator by Carl Ziliss; a four inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instrument, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

TOWNSEND HALL is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students. At the extreme south end of this floor is a large laboratory for student-work in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all appliances for showing lantern slides of livestock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lavatory, butter-making room, cheese-making room, two cheese-curing rooms and an instructor's room.

In the south end of the basement is a livestock room about forty feet square. One third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging livestock. Connected with this is a room fitted with stalls for the temporary accommodation of livestock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also on this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townsend Society, designed to seat about two hundred persons.

BIOLOGICAL HALL is designed for the special accommodation of the departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories, and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

THE GYMNASIUM AND ARMORY was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitor's gallery seating about seven hundred persons. At the

northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the level with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room which is to be the home of the University Athletic Association. On the young women's side are the locker rooms and bath rooms — precisely like those provided for the young men — a bicycle room, lecture room and private office for the instruction in sanitation and hygiene for young women.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are seven dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the seventh is the farm house.

LABORATORIES AND EQUIPMENT

AGRICULTURE

The equipment of this Department may be divided along three general lines: the plant, the museum and the illustrative materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn, and several smaller buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the Department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horses are kept and used in the farm work. The Department manages a milk dairy; having a herd of about forty cows, composed of pure bred and grade Jerseys and shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a root cellar, a work-shop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton, forage plants and foodstuff. Milling and other processes are illustrated by samples of the various products of manufacture.

The museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of livestock, farm machinery, fences, buildings, etc. The Department has and uses constantly in the class room a Beseler double oxygen-ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this Department, there is in the general library a fairly good collection of books and periodicals devoted to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (*See also* BUILDINGS — *Townshend Hall.*)

ARCHITECTURE

This work is carried on in connection with the Department of Drawing. The facilities for this work consist of a large, well-lighted drawing-room for the designing and drawing part of the work, a recitation room specially fitted with stereopticon lantern to illustrate the lectures, several hundred lantern slides of typical specimens of architecture from all parts of the world, a collection of scale design drawings, a collection of specifications of buildings that have been erected, a collection of plaster ornaments used in architectural decoration and a well selected collection of useful books in the library. The City contains many buildings of interest to the architectural student, both in a completed state and in process of erection.

BOTANY

The general Botanical Laboratory occupies part of the second floor of Botanical Hall. It is 23 x 33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also MUSEUM — *The Botanical Museum;* and BUILDINGS — *Botanical Hall.*)

CHEMISTRY

The laboratories of the department accommodate from three to four hundred students. Each laboratory is equipped with all the necessary conveniences as water, gas, electric lights, distilled water piped from a large still in the attic, air blasts, suction pumps, etc. The department is generally supplied with the best apparatus and materials for both lecture and laboratory work. Each student procures the apparatus necessary for his work from the store room which has always on hand a complete stock of all necessary materials. (See also BUILDINGS— *Chemical Hall.*)

CIVIL ENGINEERING

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30″ by 36″ top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lanterns and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; set of tracings of standard structures from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented, or made by students of the Department.

CLAY-WORKING AND CERAMICS

The University is the first, and at this time the only institution in the United States offering special facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. The facilities of the Department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthen wares to porcelain. The machinery is of the latest type and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished articles by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer-pipe, stoneware, or pottery can be burnt. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle furnace of testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has recently been put into operation. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German but containing a few English and French works, and the trade periodicals. (See also BUILDINGS — *Orton Hall.*)

DOMESTIC ECONOMY

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be as thorough and as scientific as that of any other department in the University.

DRAWING

The Department occupies the entire third floor and one room in the basement of Hayes Hall, and is provided with the following equipment for the illustration of the work in drawing and for the practical training in same:

For freehand drawing, water color and oil painting: — A large studio thirty-five by eighty feet, specially arranged and provided with adjustable tilting tables and easels, a well selected collection of pencil, pen and ink, charcoal and color specimens of work, wooden models of geometric forms, plaster-casts of ornaments, flowers, fruit and the antique.

For clay-modeling: — A specially arranged and equipped studio twenty-six by thirty-two feet for modeling in clay and casting in plaster, consisting of modeling stands, moisture box, casting table, modeling tools of wood and steel, stove and vent-hood for the preparation of gelatine molds and lockers.

For mechanical drawing and mechanical and architectural designing:—A large, well lighted room forty by eighty-five feet, provided with O. S. U. drawing tables (30″ by 36″ tops), a set of Schroeder models, a collection of shop drawings and facilities for blue-printing.

For photography: — A well arranged and equipped dark-room, printing apparatus, copying camera, six view cameras, lenses of long and short focus, telephotographic lens, shutters for instantaneous exposures and an excellent outfit for photo-micrography.

In addition to the above, the library contains a well selected collection of books pertaining to the work of the Departments. (See also BUILDINGS — *Hayes Hall.*)

ECONOMICS AND SOCIOLOGY

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business paper; also collections of coins illustrative of various periods in our monetary history, foreign coins, and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent. in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the Department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the Department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

ELECTRICAL ENGINEERING

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes from 40 H. P. down; aggregating over 200 horse power. These include direct and alternating current generators, polyphase motors, arc and incandescent lighting generators, railway and stationary motors and unipolar dynamo. The latter, with an alternating current generator and a 2-phase motor, were built by the students; it being the policy of the Department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding, —

built at the University. Arc lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory — with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the Department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

GEOLOGY

The University is able to present unusual advantages for the study of Geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the Department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories. (See also MUSEUMS — *The Geological Museum;* and BUILDINGS — *Orton Hall.*)

HORTICULTURE AND FORESTRY

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing numerous varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, current and gooseberry; (5) a vegetable garden, with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc.; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse, with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens, and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also MUSEUMS — *The Botanical Museum;* and BUILDINGS — *Horticultural Hall.*)

MECHANICAL ENGINEERING

The greater portion of Mechanical Hall is devoted to laboratory purposes. The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods

of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The north laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single or duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condenser. Pressure and vacuum guages are calibrated. Indicator springs of five makers are tested either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 800 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade, and Pelton water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pitot tube are also used. Ericsson and Rider hot air engines are tested. A Rife hydraulic engine, a Humphryes ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

METALLURGY

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A furnace room in the basement is fitted for gold and silver assaying, with improved muffle and crucible furnaces.

The lecture room in metallurgy has arrangements for projecting photographs of machines, mines and furnaces, for class illustration, and there is a large collection of such views. There is a photographic room with blue-printing facilities, where students learn to make copies of the drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determinative mineralogy. (See also BUILDINGS — *Chemical Hall;* and MUSEUMS — *The Geological Museum.*)

MINE ENGINEERING

The Department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation.

There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught map making and the platting of actual surface and underground surveys; the making of tracings of drawings and how to make blue-prints. He is also taught proper methods of keeping notes and all records necessary to an efficient engineer's office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

The lecture room has arrangements for projecting photographs of machines, mines and mine equipment, for class illustration, and there is a collection of such views. Also photographic room with blue-printing facilities, where students learn to make copies of the drawings made by themselves and those used in illustrating the lectures.

PHARMACY

The facilities provided for illustration of this work and for practical training are as follows: The apartments assigned to this work occupy the west end of the Chemical Hall, first floor and basement. The lecture room will accommodate sixty students, and is provided with a large lecture table and supplied with gas and water, and other conveniences for experiment. About the walls are arranged cases in which are exhibited rare and costly chemicals, curious drugs, and high-grade pharmaceuticals. Adjoining this room is the preparation room and storeroom, where the supplies and apparatus and material are kept, and where the apparatus for experiment and illustration before classes is prepared. Also adjoining this room is the professor's private laboratory. The main laboratory has desks for thirty-five students, each one provided with gas and water, and sufficient storage space for material and apparatus. The laboratory is furnished with apparatus for distilling, and reclaiming, with mills, balances, drying closets, steam vaporizers, hoods and other special apparatus for pharmaceutical work. Opening into the laboratory is the drug store. This drug store is complete, and is in itself a cabinet of official drugs, and all preparations thereof. It is provided with a prescription desk and all apparatus adapted for training in prescription work. Adjoining the laboratory is the reading room, where are kept the various pharmaceutical journals, the dispensatories, and many books of reference. Also adjoining the main laboratory is the balance room, which is well provided with analytical balances, specific gravity balances and microscope, all of which are intended for higher pharmaceutical work.

In the reading room is also a cabinet of crude drugs, which have been classified and numbered but bear no name. This cabinet is adapted to the study of pharmacognosy.

In addition to the foregoing equipment, the Department is possessed of an extensive range of apparatus, by means of which any branch of work in pharmacy can be successfully pursued. The Department is complete in all its details, and affords unexcelled opportunity for the study of pharmacy. (See also BUILDINGS — *Chemical Hall.*)

PHYSICS

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurements in the laboratory. A set of standards of length, capacity and

mass, sent under the act of Congress supplying such sets to the several agricultural colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a break-circuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat Melloni-Tyndall apparatus for radiant heat; standard thermometers by Baudin and others; Rutherford and Rowland, diffraction gratings; Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Salleron's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is *ex officio* State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the Department.

PHYSIOLOGY

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the Department for work in bacteriology and physiology is of the best and most approved construction, and is adapted to the accurate investigation of bacterial forms, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also BUILDINGS — *Biological Hall.*)

PSYCHOLOGY AND EDUCATION

The psychological laboratory occupies three rooms on the fourth floor of University Hall and is reasonably well equipped for work in physiological and experimental psychology and for research in related educational lines. For the study of motor processes and development the most improved form of ergograph with complete sets of myographic, chronographic, dynamometric and pneumatic recording appliances, has been provided. A complete outfit of apparatus for the study of sensation, memory and association make it possible for students of education to acquire methods of exact observation of the various mental and motor processes involved in school work. Provision has also been made for work in comparative psychology.

SHOPWORK

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-makers' turning lathes with cupboards containing the necessary turning and pattern-making tools under each, a pony planer, a buzz-planer, a circular rip and cross-cut saw, a scroll saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and a punch, shear and bar cutter. The blast for the forges is furnished through underground piping by a 45" Buffalo pressure blower, and the smoke is removed by a 55" Buffalo exhaust fan overhead. Both of these fans are driven by a 15-horse-power electric motor.

The foundry is equipped with a 24" Calliau cupola, the blast for which is furnished by a 30" Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30 horse power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work with complete sets of tools, eight speed lathes, sixteen engine lathes, two planers, two shapers, a milling machine, an upright drill, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, etc., micrometers and a great variety of special tools. (See also BUILDINGS — *Hayes Hall.*)

VETERINARY MEDICINE

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stalls for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs represented, but also the meat-producing animals from the farm, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also BUILDINGS — *The Veterinary Hospital, Biological Hall.*)

ZOOLOGY AND ENTOMOLOGY

The outfit of the Department is ample, consisting of general zoological collections, an entomological collection, a series of skeletons, alcoholic specimens, and all needed instruments. (See also MUSEUMS — *The Zoological Museum, The Lake Laboratory, Biological Hall.*)

THE LAKE LABORATORY

There has been established at Sandusky a summer laboratory for the purpose of investigations of the biological problems of the great lakes. It is located at the present site of the State Fish Hatchery in the east bay of Sandusky and is supplied with abundant aquaria, tables, boat and during the summer (June 15-September 15) is equipped with the necessary apparatus for general work. The site has been chosen with special reference to its convenience, the sheltered waters of the bay, proximity of fish packing establishments, ready access to islands and open lake and remarkably abundant forms of life available. It affords a rare opportunity for instructors and students to spend the summer vacation at practical biology in a most agreeable and profitable way. The facilities are offered free to students of any branch of biology but each investigator is expected to provide his own microscope and special apparatus for his own investigation unless otherwise arranged.

THE MUSEUMS

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

(*a.*) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.

(*b.*) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.

(*c.*) The economic minerals of the State are also shown to excellent advantage in the museum. The coals, petroleums, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.

(*d.*) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among

other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geological casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual specimens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y., and proves to be one of the largest in the country.

The museum also has a mounted skeleton of *Megalonyx Jeffersonii*, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes county, O., in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds about 1,500 skins representing very fully the North American fauna; a number of fine specimens of larger mammals, moose, hippopotamus, deer, tiger, peccary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborne's private collection of Hemiptere is deposited in the Department and available to students for comparison and study.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the University herbariums, both general and state, also Professor Kellerman's private herbarium of over 20,000 specimens deposited for use in the Botanical Department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fibers, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILDINGS — *Townshend Hall.*

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Equipment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHÆOLOGIC COLLECTION. Orton Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in the various parts of the State during the summers of 1894, 1895 and 1896, and as a result the contents of more than eighty mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

LIBRARIES

THE UNIVERSITY LIBRARY

The University Library is located in the east end of Orton Hall. The system of department libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 A. M. until 9:30 P. M.; Saturday from 8 A. M. until 4 P. M.

The management of the Library is vested in a Library Council which is composed of the President, the Librarian and the Deans of the six colleges.

STATE LIBRARIES

Students are privileged in being near the two State libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

CITY LIBRARIES

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and refer-

ence rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

SPECIAL LIBRARY IN ECONOMICS

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade journals are received and filed regularly. The business men of Columbus have contributed over $1,200 for the equipment of this commercial library.

SPECIAL LIBRARY IN ZOOLOGY AND ENTOMOLOGY

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Prof. Kellicott which was generously donated to the Department. This has been increased by gifts of special papers by a number of the leading investigators of the country and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

AIDS TO MORAL AND RELIGIOUS CULTURE

Chapel services are held daily (except Saturday and Sunday) at the University, at which the attendance of all instructors and students is expected. The services consist of singing, reading the scriptures, and prayer.

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. It has a large membership and steadily grows in influence. Services are held weekly. New students are made cordially welcome, and young church members will here enjoy Christian influences and fellowship in college life. A University Circle of the International Order of the King's Daughters and Sons holds its meeting once a week, and includes in its membership a majority of the women attending the University. A club for the study and practice of philanthropy has recently been organized by the King's Daughters.

An effort is being made to complete, by subscription, the fund which was begun two years ago by students, alumni and professors, for the erection of a building to accommodate the student organizations of the University.

LITERARY AND OTHER SOCIETIES

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the Athenæan Literary Society, open to young men, was founded in the winter of 1896-'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed. The Chemical Association is a similar organization in the line of chemistry.

The Political Science Club is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported, and current questions and publications in political science, considered and discussed.

The Engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Townshend Society of the College of Agriculture meets weekly for the discussion of current topics in agriculture and related subjects.

The Germania Society was founded in 1895. Only students that have had elementary ("first year") German are eligible to membership.

The aim of this society is to give to its members additional opportunities for the study of German Literature and for the practical use of the German language. Nothing but German is spoken at the meetings, which are held every other week throughout the University year. Students of German find it very advantageous to be present at those meetings and to take an active part in them.

The Ethical Society, open to all students and to members of the Faculty, was organized in the winter of 1896-'97, and meets on the afternoon of each alternate Sunday.

The Philosophical Society, organized under the auspices of the departments of Philosophy and Pedagogy, in the winter of 1896-'97, is open to the students of the two departments named, and to those interested in Philosophy.

The Organic Evolution Club was organized in the winter of 1896-'97 by those students and members of the Faculty especially interested in the study of Evolution.

The O. S. U. Dramatic Club was organized in 1893. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, composed of sixteen members; the O. S. U. Octette, a mandolin orchestra of eight pieces; the O. S. U. Mandolin and Guitar Club, and the Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the possession of the University forms a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The Club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club was organized for the purpose of promoting art interest among the students of the University. Its membership is confined to University circles. The active members meet once a week for practical work; the associate members meet once a month in open session for literary programs bearing upon art, history and criticism.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

MILITARY SCIENCE AND TACTICS

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the Law College, and such others as may be specially excused, shall render two years of cadet service as a condition of grad-

uation. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the Department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their University work and the work of the Department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this Department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to a battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley & Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officer's sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the Department consist of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers' swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand rounds of blank cartridges for cadet rifles.

PHYSICAL TRAINING

Competent instruction in hygiene and general sanitation is given by the director of the Gymnasium, who has entire charge of the physical training and well-being of all students. Supplementing this work, the practical instruction in military tactics is found to be a most valuable aid. In addition to this, the University grounds afford excellent opportunities for general athletics, and the students support well organized clubs in base ball, foot ball and lawn tennis. These and other sports are participated in by large numbers, and friendly contests are occasionally held with other colleges. Besides the special clubs named above, the students have an athletic association which holds an annual "Field Day," in which prizes are given to the victors in the various contests usual on such occasions.

OHIO FORESTRY BUREAU

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

TERMS AND VACATIONS

The first term of the year 1899-1900 begins on Wednesday following the tenth day of September, and closes on the Wednesday preceding Christmas. The second term begins on the Wednesday following the first day of January, and closes on the Friday following the twenty-first day of March. The third term begins on the Monday following the close of the second term, and closes on Commencement day, which is the Wednesday following the eleventh day of June.

In the college of Arts, Philosophy and Science and in the college of Law the first semester begins on the Wednesday following the tenth day of September and closes on the Friday preceding the second semester. The second semester begins on the Monday of the eighteenth week preceding Commencement Week and closes on Commencement Day.

Regular college exercises are omitted on Thanksgiving Day and the day following, on the twenty-second day of February, and on Memorial Day.

The first term of the University year 1900-1901 and thereafter will begin on the Tuesday following the sixteenth day of September and will close on the Wednesday following the 17th day of June. The first term will close on the Wednesday preceding Christmas; the second term will begin on the Tuesday following the first day of January and will close on the Friday preceding the first Monday in April; the third term will begin on the Wednesday following the close of the second term. The second semester will begin on Monday of the eighteenth week preceding commencement week; and the first semester will close on the Friday preceding the opening of the second semester.

Regular college exercises will be suspended from 4 o'clock P. M. of the Wednesday preceding Christmas until 8 o'clock A. M. of the Tuesday following the first day of January; on Thanksgiving and the day following; on University day which is the twenty-second day of February; from 4 o'clock P. M. of the Friday preceding the first Monday in April until 8 o'clock A. M. of the Wednesday following the first Monday in April; and on Memorial Day.

FEES

THE COLLEGES

INCIDENTAL FEE. — A charge of fifteen dollars a year is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

LABORATORY FEES. — Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6	$10 00
" 15	5 00
Anatomy and Physiology, 53, 54, 55, 56, 59, 60	7 50
" " (Vet. Medicine) 4	5 00
Botany, 4, 6, 7, 8, 6a	2 00
" 53, 55, 57, 58, 59, 60, 64	3 00
" 56 (half semester)	1 50
Ceramics, 1, 2, 3, 7, 8	1 50
" 9, 10, 11, 12	5 00
Domestic Science, 1, 2, 3, 4	5 00
" 5, 6, 7, 8, 9, 11, 12, 13	1 00
Drawing, 7	2 00

Elec. Engineering, 4, 5, 4 or 5 hrs., $7.00; 3 hrs. or less	5 00
Gymnasium	1 00
Law of Contracts (Engineering)	5 00
Metallurgy, 3, 5, 6	1 50
Mechanical Engineering, 12, 13, 14, 15, 16, 17, 23, 24, 25	5 00
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18, 51	1 50
Pharmacy, 52	2 25
Physics, 5, 6, 7, 9, 11, 3 hrs., $5.00; over 3 hrs	7 00
Physics, 54, 55, 56, 57, 58, 60, 3 hrs., $7.50; over 3 hrs	10 50
Shopwork, 4 hrs. or less	5 00
Shopwork, 5 hrs. or more	7 00
Zoology and Entomology, 53, 54, 55, 56, 61, 62	7 50
Zoology and Entomology, 57, 58, 59, 60	4 50
Zoology and Entomology (Agriculture), 4, 7	1 00

The fees of the College of Law are $30 per semester, including the usual incidental fee.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water ($2.25 each semester). He is also required to buy his own supplies, as he needs them, at the general storeroom in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

All term dues must be paid at the opening of each term as a condition of admission to classes.

AUDITOR'S FEE

On presentation to the Bursar of the written consent of the head of a department, and on payment to the Bursar of an auditor's fee of one dollar, any person engaged in teaching is permitted to attend, in that department, any class or course (not to exceed three hours a week for one-half year) which is announced to be especially for teachers or those intending to teach.

GRADUATION FEE. — A fee of five dollars, to cover expenses of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FREE SCHOLARSHIP IN AGRICULTURE AND DOMESTIC SCIENCE, AND IN VETERINARY MEDICINE. — A free scholarship, good for the two-year Courses, or for the First year of the Short Courses and the First year of the four-year Courses in the College of Agriculture and Domestic Science, is granted to one student annually from each county in Ohio. Each scholarship is valid two years from its grant, and covers the incidental fee and all laboratory fees (except gymnasium fee), but the person appointed to receive its benefits is subject to all the other conditions prescribed for admission to the Course. If in any county there is no applicant for the free scholarship in Agriculture, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted, subject to the same conditions as are prescribed for the free scholarship in Agriculture. The appointments are made by the county boards of agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiries should be addressed to the Secretary or President of the County Agricultural Society. For further information concerning these scholarships, inquiries should be addressed to the Dean of the College of Agriculture and Domestic Science.

THE COLLEGE OF LAW

INCIDENTAL FEE. — An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline, character of studies selected, etc., as other students in the University.

TUITION FEE. — In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students.

GRADUATE FEE. — A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE. — A fee of five dollars (to cover the expenses of graduation, diplomas, etc.,) is charged to all who take the degree of Bachelor of Laws, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

OTHER EXPENSES

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students. Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and fifty cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat) about fourteen dollars. It is quiet in pattern, and is designed to be worn daily in place of civilian dress.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses:

	Low	Average	High
Incidental fees	$15 00	$15 00	$15 00
Laboratory fees	15 00	20 00	54 00
Books and stationery	15 00	25 00	40 00
Room	4 50	37 00	75 00
Furniture	10 00		
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	$143 50	$221 00	$348 00

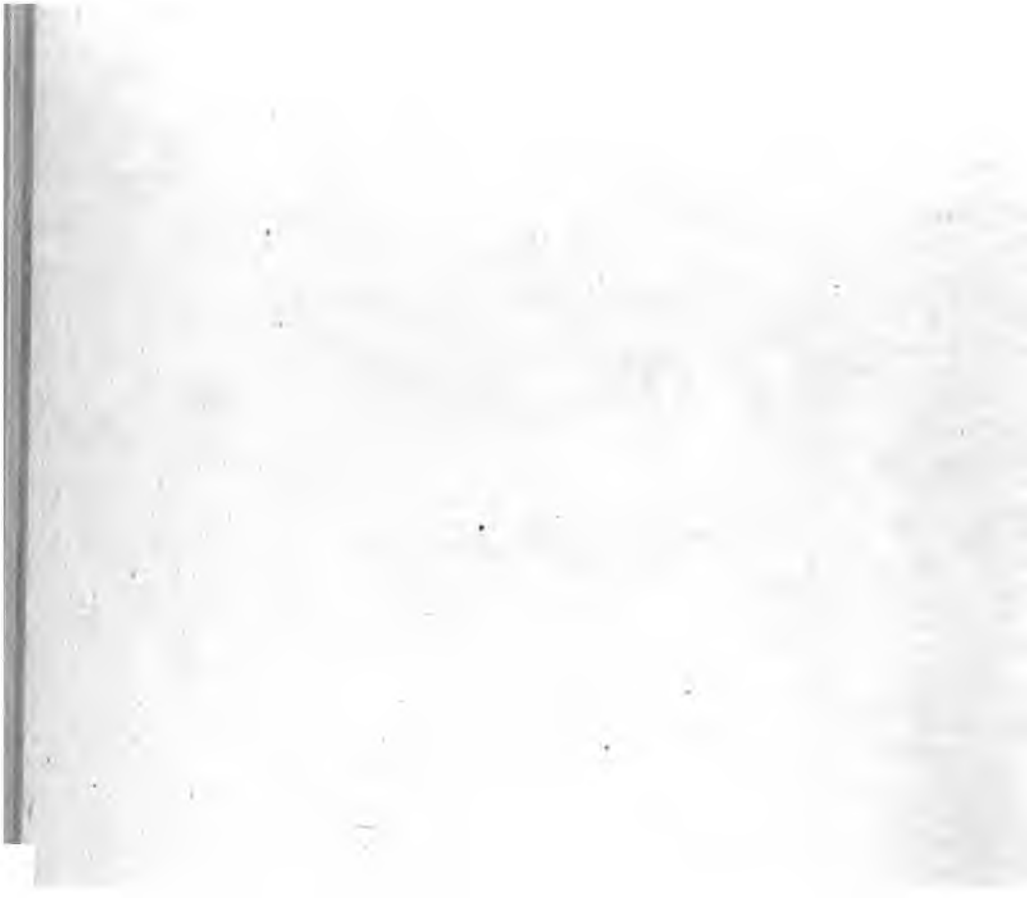
The second and third estimates for room include light, fuel and care. The third estimate is for a room occupied by a single student. The requirements for laboratory fees and books depend upon the course of study pursued.

SELF-SUPPORT

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. ***But the University cannot promise work to all applicants.*** Many students find work in private families, in offices, and in various occupations, by means of which they defray at least a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of a lack of money for necessary expenses, *after having been say sixty days on the ground* — or long enough to inform himself as to the opportunities for securing employment. An employment bureau is maintained at the University, where the names of those seeking work and of those desiring workers are recorded.

For further information, address "Executive Office, State University, Columbus, Ohio."

THE COLLEGES



THE COLLEGES

ADMISSION

The University is open on equal terms to both sexes.

The entrance examinations for 1899 will be held on Monday and Tuesday, ıne 12 and 13, and on Monday and Tuesday, September 11 and 12. A part of ıe examinations may be taken in June and the remainder in September. Condions incurred at the June examinations must be removed at the September ıaminations.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy ıd Science, or of Pharmacy, must be at least sixteen years of age; for admission) the College of Engineering or of Veterinary Medicine must be at least seventeen ears of age; for admission to the College of Law must be at least eighteen years f age. Each must be provided with credentials of scholarship from his last ıstructor or from the last institution with which he has been connected, and ·ith a certificate of good moral character.

There are three modes of admission to the University:

1. Certificates of the preparatory departments of Colleges of approved standıg and of Normal schools in Ohio are accepted, if found satisfactory, in lieu of xamination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the ext books used, the amount of work done in each study, the amount of time evoted to it, the date of the examination, and the applicant's rank or standing in . A copy of the course of study should accompany the certificate; and both hould be sent to the University not later than the first of September. *The Iniversity cannot promise this recognition to those certificates presented during ntrance week.*

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are equired to bring certificates of honorable dismissal.

Teachers' certificates (in force) will be accepted at their face value.

2. From time to time the University approves the courses of study in certain Iigh Schools of the State; and the graduates of these High Schools are admitted n presentation of cards issued to them at their graduation by the University ırough the Principals of the High Schools.

3. All other applicants are subject to examination on the groups of study ıentioned below under the headings of those Colleges and Courses in the Uniersity which they desire to enter.

Full equivalents for the text-books named will be accepted.

ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in any of the Colleges of he University, and do not desire to become candidates for degrees, will be adıitted on the following conditions:

1. The regular entrance requirements must be satisfied.

But applicants who are not less than twenty-one years of age (eighteen years, in the College of Engineering), after obtaining credit for elementary or "grade" work, and for such other subjects as may be necessary to qualify them for the classes that they wish to enter, may, on the presentation of satisfactory reasons, be admitted by the proper Faculty to any class in the University; provided, that if any student who has been admitted on these conditions afterwards becomes a candidate for a degree, he shall take the omitted entrance examinations at least twelve months before the degree is conferred.

2. On entering the University, students desiring to pursue special work are required to lay before the proper Faculty, for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of attendance. Such students will be held as strictly to their accepted schemes of work as are the regular undergraduates to their courses of study.

3. *Permission to enter as special undergraduates will be refused to all who fail to give satisfactory evidence of definiteness of purpose, and will be withdrawn whenever the conditions on which it was granted cease to exist.*

ADMISSION TO ADVANCED STANDING

1. Applicants who do not come from some other University or College must first obtain admission to some College of the University in the manner already described. They will then be examined on the undergraduate studies for which they ask credits.

2. Applicants who come from the collegiate department of an approved College, and who bring explicit and official certificates describing their course of study and scholarship, and also certificates of honorable dismissal, will be admitted without examination except such as may be necessary to determine what credit they are to receive here for work done in the College from which they come.

ADMISSION TO GRADUATE WORK

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

IN THE COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING, LAW AND PHARMACY

Masters degrees are conferred upon graduates in Agriculture, Horticulture and Forestry, Engineering, Law and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study.

IN THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory comple-

tion, during not less than one year of residence (devoted exclusively to such work), of an approved course of study, covering a major subject and an allied minor subject. The major subject (two-thirds) shall be graduate work, taken in one of the departments of the Arts, Philosophy and Science College. The minor subject (one-third) may be in graduate work.

2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject must be taken in one of the Departments of Science in the Arts, Philosophy and Science College. The minor subject must be in an allied Science.

3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence of a course of study in one or more of the departments of the College of Arts, Philosophy and Science, not less than one-third of which course must be graduate work and not more than two-thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of the College of Arts, Philosophy and Science. But a degree conferred under the provisions of this paragraph shall in no case be counted towards the degree of Doctor of Philosophy, or Doctor of Science.

4. With the consent of the Faculty the work of candidates for the Master's degree may be distributed over more than one year.

5. Each candidate for a Master's degree must also prepare and submit a thesis, and after its acceptance, be examined upon the work assigned him.

6. The degree of Ph. D. or of D. Sc. will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year or of the first two years, of the three, may be done at another University which offers equivalent graduate work.

7. Candidates for the degree of Doctor of Science must take their work wholly in Science.

8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

FELLOWSHIPS

To encourage graduates of this University, and of other similar and approved institutions in this state, to continue their work and to complete the courses necessary to second (and other) degrees, the University authorities have established fellowships in several departments. These demand about one-half of the time of the fellow for laboratory instruction or other similar assistance—as far as possible,

along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from $250 to $300 for the University year.

Following are the fellowships for the academic year 1899-1900 as far as at present determined:

Anatomy and Physiology, Botany, Chemistry (two), American History and Political Science, Industrial Arts, Mathematics (two), Mechanical Engineering, Philosophy, Rhetoric and English Language, Veterinary Medicine.

In addition to these, Mr. Emerson McMillin has established two fellowships: one in Astronomy, $300 for the academic year; and one in Economics, $250 for the academic year. No service is required in these fellowships, and fellows are expected to give their entire time to their graduate work.

Correspondence should be directed to the Executive Office of the University.

PRIZES

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law: which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

FOR ADMISSION[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English* (*a*) — Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from the list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises — paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition — Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in four types — description, narration, exposition and argumentation. Some of these subjects should be taken from English and American classics, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during his preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics — Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's Speech on *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's Minor Poems (*Comus, Lycidas, L'Allegro, Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and shouldebe prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra* — Venable's Easy Algebra, complete.

4. *Botany* — Gray or Kellerman's Elementary Botany and Spring Flora, or equivalent.

7. *Latin* — Pronunciation (the Roman method): Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico.*

Or *French* — The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German* — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the present, the *German* or *French* required for admission may be begun at the University, but without University credits.

5. *Plane Geometry* — White, Venable, Wentworth, or Wells.

6. *Physics* — Gage, Carhart and Chute, Avery, or Appleton.

7. Either of the following:
 Civil Government — Fisk or Thorpe preferred.
 History — Myers's *General History.*

COURSE IN AGRICULTURE

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Agr'l Chemistry (1) Principles.	5.	Ag'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany and Vegetable Pathology.	5.
Drawing (10)	2.				
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Zoology (1) Invertebrate.	3.	Shopwork (1)	3.		
Cadet Service (men).*		Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.
Hygiene and Physical Training (women).		Cadet Service (men).		Cadet Service (men).	
		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
Horticulture (1) Elements.	4.	Shopwork (2)	3.	Horticulture (1) Elements.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Drawing (16)	3.
†French (1) Elementary, or †German (1) Elementary.	4.	†French (1) Elementary, or †German (1) Elementary.	4.	†French (1) Elementary, or †German (1) Elementary.	4.
Geology (2) General.	5.	Geology (2) General.	5.	Astronomy (3) Meteorology.	2.
Veterin'y Medicine (28) Anatomy.	5.	Veterin'y Medicine (29) General Pathology.	5.	Veterin'y Medicine (30) Special Pathology.	5.

* A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

FOURTH YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agriculture (14) Animal Mechanics.	4.	Agriculture (15) Dairy.	4.	Agriculture (16) Rural Economics.	4.
History (5) U. S. Political.	4.	History (5), Economics (2) Political Economy.	4.	Economics (2)	4.

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN HORTICULTURE AND FORESTRY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological, Economic.	5.	Botany (8) Economic Botany. Vegetable Pathology.	5.
Drawing (10)	2.				
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
		Shopwork (1)	3.		
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
*French (1) Elementary or *German (1) Elementary.	4.	French (1) Elementary or German (1) Elementary.	4.	French (1) Elementary or German (1) Elementary.	4.
Horticulture (1) Elements.	4.	Shopwork (2)	3.	Horticulture (1) Elements.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Astronomy (3) Meteorology.	2.
				Drawing (16)	3.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.
Geology (2) General.	5.	Geology (2) General.	5.	Zoology (4) Economic Entomology.	3.
Horticulture (5) Pomology, Viticulture.	4.	Horticulture (6) Vegetables and Nursery.	4.	Horticulture (7) Small Fruits and Spraying.	4.

FOURTH YEAR

REQUIRED

Horticulture (8) Elementary Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
Horticulture (11) Arboriculture.	2.	Horticulture (12) Forestry.	2.	Horticulture (13) Landscape Gardening.	2.
History (5) U. S. Political.	4.	History (5), Economics (2) Political Economy.	4.	Economics (2)	4.

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head

*Where credit is received for Elementary French or German, French (2) 4 or German (4) 4 is required.

of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN DOMESTIC ECONOMY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany, Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory.*	5.	Agr'l Chemistry (4) Laboratory.*	5.	Physiology (3) Chemical Physiology.*	3.
Domestic Economy (1)	4.	Domestic Economy (2)	4.	Domestic Economy (3)	4.
Drawing Mechanical.	2.	Drawing Architectural.	2.	Drawing (15) House Designing.	2.
†French (1) Elementary, or †German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Domestic Economy (10) Household Economics.	1.
				Hygiene and Phys. Train.	

THIRD YEAR

REQUIRED

Domestic Economy (4)	4.	Domestic Economy (5)	4.	Domestic Economy (6)	4.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.
History (5) U. S. Political.	4.	History (5) U. S. Political.	4-2.	Economics (2) Political Economy.	4.
Education (1)	4.	Economics (2) Political Economy.		English Literature (2)	4.
		Education (1)	4-2.		
		English Literature (2)	4-2.		

* Specific laboratory work will be provided for students in this course, where necessary.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

FOURTH YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Domestic Economy (7)	4.	Domestic Economy (8)	4.	Domestic Economy (9)	4.
Horticulture (8)	2.	Horticulture (9)	2.	Horticulture (10)	2.
Elements of Floriculture.		Commercial Floriculture.		Home Floriculture.	
		Physiology (6)	2.		

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

THE SHORT COURSES

A two-year course in Agriculture and a two-year course in Domestic Economy have been provided for those who have neither the time nor the means to pursue four-year courses. These short courses also enable those who lack the preparation for entering the four-year courses to obtain such preparation. The studies of the first year of the short courses, it will be noticed, nearly prepare the student to enter the first year of the four-year courses. The student having had chemistry in the first year of a short course can finish his preparation for either of the four-year courses during the first year of the latter course, in place of the chemistry required.

At the end of the first year of the Short Course in Agriculture, for example, the student has three strings to his bow. He may finish the second year of the short course by taking the more technical studies from the four-year courses, if lack of time or means demand it; or he may enter either the four-year course in Agriculture or the four-year course in Horticulture and Forestry. The same is practically true of the Short Course in Domestic Economy.

These short courses are not, of course, to be compared in breadth, strength, or thoroughness with the full courses of the University. They are far better preparation for the work to which they lead than no preparation; but all students are urged to take or to continue into the full four-year courses wherever possible.

ADMISSION TO THE SHORT COURSES IN AGRICULTURE AND DOMESTIC ECONOMY AND THE COURSE IN DAIRYING

Applicants must be at least fifteen years of age, and unless over twenty-one years of age must pass an examination in *Arithmetic*, *Geography*, *Grammar* and *United States History*, or bring High School or other certificates for those branches. Applicants who are over twenty-one are admitted without examination.

THE SHORT COURSE IN AGRICULTURE

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3) Geometry.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Drawing (10) Mechanical.	2.	Shopwork (1)	3.	Physiology (2) General.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Not less than fifteen hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
Botany (6) Physiological.	5.	Agriculture (15) Dairy.	4.	Zoology (7) Entomology.	3.
Horticulture (1) Elements.	4.	Horticulture (1) Elements.	4.	Horticulture (1) Elements.	4.
		Shopwork (2)	3.	Veterinary Medicine (30) Special Pathology.	5.
Veterinary Medicine (28) Anatomy.	5.	Veterinary Medicine (29) General Pathology.	5.	Horticulture (7)	4.
Horticulture (5)	4.	Horticulture (6)	4.		
		Physiology (6)	2.		
Cadet Service.		Cadet Service.		Cadet Service.	

COURSE IN DAIRYING

The course in dairying begins each year on the Wednesday following the first day of January, and continues during the entire term. Butter-making, as practiced in the farm dairy and in the creamery, is thoroughly taught. The student performs all necessary operations in the manufacture of butter by these two methods, under the guidance of the instructors. In cheese-making the principles are taught, with elementary practice.

Agriculture (5). Dairy Farming. — Three hours each week. Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms.

Agriculture (6). Butter and Cheese-making. — Four half days each week. Laboratory practice in running separator, churning, working butter, making cheese, milk testing, etc.

Agriculture (7). Butter and Cheese-making. — Two hours each week. Lectures and recitations.

Agricultural Chemistry (7). Milk Chemistry and Milk Testing. — Two hours each week. Lectures and laboratory practice.

Physiology (6). Bacteria in their relation to Milk, Butter and Cheese. — Two hours each week. Lectures and laboratory practice.
Veterinary Medicine (17). Diseases of the Cow. Three hours each week.
Mechanical Engineering (26). Steam Machinery. — One hour each week.

SHORT COURSE IN DOMESTIC ECONOMY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3) Geometry.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

SECOND YEAR

REQUIRED

Domestic Economy	4.	Domestic Economy	4.	Domestic Economy	4.
Domestic Economy	4.	Domestic Economy	4.	Domestic Economy	4.
Hygiene and Phys. Train.		Hygiene and Phys. Train.		Hygiene and Phys. Train.	

ELECTIVE

Not less than seven hours per week chosen from the following courses; subject to the conditions named under "Departments of Instruction":

Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany, Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
English Literature	4.	English Literature	4.	English Literature	4.
Horticulture (8) General Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.

COLLEGE OF ARTS, PHILOSOPHY, AND SCIENCE

FOR ADMISSION[1] TO THE COURSE IN ARTS

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English* (*a*) — Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from the list of classics printed below.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises — paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition — Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in four types — description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below, and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics — Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the pot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro and Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra* — Taylor's Academic or equivalent.

4. *Botany* — Kellerman's Elementary Botany and Spring Flora or equivalent.

5. *Civil Government* — Fiske or Thorpe preferred.

6. *Geometry, Plane and Solid* — Venable, White, Wentworth or Wells.

7. *Greek* — Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first three books of Xenophon's *Anabasis.* At least two years should be devoted to this work.

8. *History* — Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.

9. *Latin* — Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Aeneid*, with Prosody; Prose Composition, Daniell or Collar or Jones or Dodge and Tuttle, entire.

10. *Physics* — Carhart and Chute, Gage, Avery, or Appleton.

For the present, the *Greek* required for admission may be begun at the University, but without University credits.

TO THE LATIN COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course in Arts; except that instead of *Greek*, the applicant must offer *French* or *German*, as follows:

French — The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

German — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the year 1899, the *German* or *French* required for admission may be begun at the University, but without University credits. For the year 1900, and thereafter, the full requirements as above stated will be held to.

TO THE MODERN LANGUAGE COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course in Arts; except that instead of *Latin* and *Greek*, the applicant may offer *Latin* and *French*, or *Latin* and *German*, or *French* and *German*, in the amounts specified above.

For the year 1899, either the *French* or the *German*, (but not both) required for admission may be begun at the University, but without University credits.

For the year 1900, and thereafter, the full requirements as above stated will be maintained.

TO THE ENGLISH COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Modern Language Course in Philosophy. But in place of one of the foreign languages the applicant may offer the following group:

1. *Chemistry* — Williams or Remsen.
2. *English Literature* — Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, *English History* — Montgomery.
3. *Physiology* — Martin (briefer course).

For the year 1899, one modern language required for admission may be begun at the University, but without University credits. For the year 1900, and thereafter the full requirements as above stated will be held to.

TO THE COURSE IN COMMERCE AND ADMINISTRATION

The requirements are the same as for admission to the Modern Language Course in Philosophy.

TO THE COURSE IN SCIENCE

The requirements are the same as for admission to the Modern Language Course in Philosophy.

TO GRADUATE WORK

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory completion, during not less than one year of residence (devoted exclusively to such work), of an approved course of study, covering a major subject and an allied minor subject. The major subject (two-thirds) shall be graduate work, taken in one of the departments of this (the Arts, Philosophy and Science) College. The minor subject (one-third) may be in graduate work.

2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University, or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject shall be taken in one of the Departments of Science in this (the Arts, Philosophy and Science) College. The minor subject shall be in an allied Science.

3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University, or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence, of a course of study in one or more of the departments of this College, not less than one-third of which course shall be graduate work and not more than two-thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of this College. But a degree conferred under the provisions of this paragraph shall in no case be counted towards the degree of Doctor of Philosophy, or Doctor of Science.

4. With the consent of the Faculty the work of candidates for Master's degree may be distributed over more than one year.

5. Each candidate for a Master's degree must also prepare and submit a thesis, and, after its acceptance, be examined upon the work assigned him. The regulations as to undergraduate theses apply to theses for Master's degree also.

6. The degree of Ph. D., or of D. Sc., will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year, or of the first two years, of the three, may be done at another University which offers equivalent graduate work.

7. Candidates for the degree of Doctor of Science shall take their work wholly in Science.

8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

COURSE IN ARTS

Degree: Bachelor of Arts

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek (51) Xenophon.	4.	Greek (52) Herodotus, History.	4.
Latin (51) Cato, Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) English Composition.	2½	Rhetoric (52) English Composition.	2½.
Cadet Service (men).* Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3	Zoology (52) Comparative Zoology.	3.

* A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek (53) Lysias.	4.	Greek (54) Homer.	4.
†History (55) United States or †Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
*Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year — chosen from the courses in this College; *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

*Major Study.	5.	Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

* Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

† The subject not taken the first Semester will be taken the second.

LATIN COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary, or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Latin (51) Cato, Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
*English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

* The subject not taken the first semester, to be taken the second semester.

THIRD YEAR

First Semester	Credit hours	Second Semester	Credit hours
Philosophy (51) Psychology.	4	Philosophy (52) Logic and Ethics.	4.
†Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year — chosen from the courses in this College; *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

†Major Study	5.	†Major Study	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

MODERN LANGUAGE COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

French	4.	French	4.
German	4.	German	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Phys. Train. (women).		Hygiene and Phys. Train. (women).	

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

One of the following (the choice being for the year):

First Semester	Credit hours	Second Semester	Credit hours
Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (56) Systematic and Physiological.	4.	Zoology (64)	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (58) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

French	4.	French	4.
German	4.	German	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52) Introductory.	4.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
†Major Study.	4.	†Major Study.	4.

ELECTIVE

Eight hours a week through the year — chosen from the courses in this College; *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

†Major Study.	5.	†Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The

* The subject not taken the first semester, will be taken the second semester.

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

ENGLISH COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
History (51) European.	3.	History (52) European.	3.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Rhetoric and English Language (69) History of English.	2.	Rhetoric and English Composition (70) Development of Prose.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57) Laboratory.	3.	Botany (58) Laboratory.	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Philosophy (53)	3.	Philosophy (54)	3.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52) Introductory.	4.
Rhetoric and English Language (71) Old English.	2.	Rhetoric and English Language (72) Old English.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

* The subject not taken the first semester, will be taken the second.

THIRD YEAR

First Semester	Credit hours	Second Semester	Credit hours
Philosophy (55)	3.	Philosophy (56)	3.
†Major Study.	4.	Major Study.	4.

ELECTIVE

Eight hours a week through the year — chosen from the courses in this College; *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

Major Study.	5.	Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN COMMERCE AND ADMINISTRATION

Degree: Bachelor of Philosophy

FIRST YEAR

French (51) Elementary.	4.	French (52) Prose and Plays.	4.
German (51) Elementary.	4	German (52) Elementary.	4.
History. (51) European.	3.	History (52) European.	3.
Mathematics (67) Algebra, Analytics, Calculus.	5.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (55)		French (56)	
Modern Literature		Modern Literature	
or	4.	or	4.
German (55)		German (56)	
Literature.		Lyrics.	
*History (55)		Economics (52)	
United States		Elementary	
or	4.	or	4.
*Economics (51)		History (56)	
Elementary.		United States.	
History (53)	3.	History (54)	3.
England.		England.	
Rhetoric (53)	4	English Literature (52)	4
Analysis of Prose.		Introductory.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Phys. Train. (women).		Hygiene and Phys. Train. (women).	

One of the following (the choice being for the year):

Botany (57)	3.	Botany (58)	3.
Laboratory.		Laboratory.	
General Chemistry (51)	3.	General Chemistry (52)	3.
Inorganic.		Inorganic.	
Physics (51) or (53)	3.	Physics (52) or (54)	3.
Mechanics, Heat, etc.		Electricity, Magnetism, etc.	
Zoology (51)	3.	Zoology (52)	3.
Comparative Zoology.		Comparative Zoology.	

THIRD YEAR

†Elementary Law	6.	†Contracts	4.
Philosophy (51)	4.	Philosophy (52)	4.
‡Major Study	4.	‡Major Study	4.

ELECTIVE

From the list of courses mentioned below, selection may be made to make up the required number of hours. Not less than sixteen nor more than eighteen hours a week are permitted and no substitutions or options further than those indicated below.

Economics {(53) (55) (57) (59) (63) (65)}	2 or 3.	Economics {(54) (56) (58) (60) (64)}	2 or 3.
German	2 or 3.	German	2 or 3.
History {57 59 63 65}	2 or 3.	History {(58) (60) (64) (68)}	2 or 3.
Political Science (51) (53)	2 or 3.	Political Science (52) (54)	2 or 3.
Rhetoric (57)	3.	Rhetoric (58)	3.
Romance Language	2 or 3.	Romance Language	2 or 3.

* The subject not taken the first semester will be taken the second semester.

† In place of Elementary Law six hours; Commercial Law four hours and Corporations (Private and Municipal) two hours may be substituted. Also in place of Contracts, four hours, any two of the following may be substituted: Corporations (Private), Insurance, Agency, Sales, Mortgages.

‡ See note page 79.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
†Major Study.	5.	†Major Study.	5.
Electives (as in third year).	10.	Electives (as in third year).	10.

THESIS

At the beginning of the fourth year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN GENERAL SCIENCE

Degree: Bachelor of Science

FIRST YEAR

Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Mathematics (67), (65) Algebra, Analytics, Calculus or Mathematics (55), (57) Trigonometry and Algebra.	4. 5.	Mathematics (68), (66) Trigonometry, Analytics, Calculus or Mathematics (56), (58) Algebra and Analytics.	4. 5.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Economics (51) Political Economy.	4.	Rhetoric (54) Analysis of Prose.	4.
‡French or ‡German	4.	French or German	4.
Physics (51) Mechanics, Heat, etc.	3.	Physics (52) Electricity, Magnetism, etc.	3.
Physiology (51) Human Anatomy.	3.	Physiology (52) Physiology.	3.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

Together with one of the following subjects, to be continued through the year:
(a) Botany (57), (58), each three hours credit or (59), (60), each five hours credit for a semester. (b) General Chemistry (53), (54), each five hours credit. (c) Geology (51), (52), and Metallurgy (52). Geology running for two-thirds of the year and Metallurgy for one-third; total, five hours credit for the year. (d) Mathematics (59), (61), (60), (62), each five hours credit for a semester. (e) Zoology (53), (54), each three hours credit, or (55), (56), each five hours credit.

THIRD YEAR

†Geology (if not taken the second year) General or ‡French or German	5. 4.	Geology (if not taken the second year) General and **Astronomy (52) General or **Astronomy (54) Mathematical.	5.
Philosophy (53)	3.	Philosophy (54)	3.
*Major Study.	4.	Major Study.	4.

Elective: Four hours a week through the year — chosen from the courses in this College, *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any courses taught in the University; provided, that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen in the College of Engineering.

† In the Second Semester, Geology is followed by Astronomy, which occupies the last nine weeks of the Semester.

* Major Study. Not later than the beginning of the Third Year each student shall elect a Major Study in Mathematics or in a Science in which Laboratory instruction is given. This Major Study shall be in one department, or with the consent of the professors in charge, in two allied departments in this college. To the Major Study the student shall devote not less than four nor more than ten hours a week during the Fourth Year.

‡ It is desired that the student on completing this course, shall possess a good reading knowledge of both French and German. Therefore, the student entering on both French and German will take both languages in the University, each for one year. He who enters on one Modern Language will continue that language one year in case he cannot read easy prose at sight and take the other language for one year. In case a reading knowledge of one Modern Language is possessed, the student will take the other language two years. The third year of Language in the case of students making the Mathematics a specialty will be that language of which the student has the less knowledge.

** Students who elect Mathematics as their Major Study shall, in the Third Year, take French or German four hours the first semester and Astronomy five hours the second semester instead of Geology five hours the first semester and Geology and Astronomy five hours the second semester.

FOURTH YEAR

First Semester	Credit hours	Second Semester	Credit hours
Major Study.	5.	Major Study.	5.
Electives.	10.	Electives.	10.

THESIS

As a requisite for graduation each student must present an acceptable thesis embodying the results of a special research. The line of research must lie within the field of the major study, and is subject to the approval of the professor or professors having the major study in charge; and the student shall enter on this work not later than the beginning of the Senior year, and shall devote to it not less than two hours a week, or its equivalent, for one year, independently of his other work. The subject of thesis, together with a written approval of it by the professor or professors directing the investigation, must be submitted to the President of the University, not later than he beginning of the second semester of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day. In case two or more students are pursuing the same major study, a joint research and thesis may be made.

THE SPECIAL COURSES

COURSE PREPARATORY TO LAW AND TO JOURNALISM

FOR ADMISSION

The requirements for admission to any of the four year courses in the College of Arts, Philosophy and Science; except that the applicant must not be less than eighteen years of age.

FIRST YEAR

English Literature (51) Introductory.	4.	Economics (52) Elementary.	4.
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Prose and Plays.	4.
History (51) European.	3.	History (52) European.	3.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Science, Elective.	3.	Science, Elective.	3.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Economics (55) Practical Problems.	2.	Economics (56) Industrial and Social Reforms. Principles.	2.
English Literature Elective.	2 or 3.	English Literature Elective.	2 or 3.
History (53) England.	3.	History (54) England.	3.
History (55) United States.	4.	Rhetoric (54) Analysis and Prose.	4.
Philosophy (53) Psychology.	3.	Philosophy (54) Logic.	3.
Rhetoric (55) Newspaper work.	1.	Rhetoric (56) Newspaper work.	1.
Rhetoric (69) History of English.	2.	Rhetoric (70) Development of Prose.	2.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

NOTE — A student desiring to continue French or German may substitute French (55 and 56), or German (55 and 56), for four hours of the studies of the second year. The studies thus deferred must be taken in the third year.

THIRD YEAR

Not less than sixteen nor more than seventeen hours a week, including studies deferred from the second year; selections to be made from the following, subject to the conditions named in the "Departments of Instruction." In view of the fact that this is a special course for special purposes, no substitutions or options further than those indicated below, will be permitted.

Economics (57) The Transportation Problem.	2.	Economics (56) Money and Banking.	2.
English Literature Elective.	2 or 3.	English Literature Elective.	2 or 3.
History (61) American History.	2.	History (62) American History.	2.
Education (57) History of Education in the United States.	2.	Education (54) History of Education in the United States.	2.
Philosophy (55) Ethics.	3.	Philosophy (56) Modern.	3.
Political Science (51) International Law.	2.	Political Science (52) Municipal Government.	2.
Political Science (53) Institutions of the U. S.	3.	Political Science (54) Comparative Institutions.	3.
Rhetoric (57) Brief Making and Argument.	3.	Rhetoric (58) Brief Making and Argument.	3.
Rhetoric (59) Poetics and Verse Making.	2.	Rhetoric (60) Short Stories.	2.

COURSE PREPARATORY TO THE STUDY OF MEDICINE

FOR ADMISSION

Applicants must be at least seventeen years old, and must pass in *Grammar, Geography, Arithmetic, Algebra (through quadratics), Plane and Solid Geometry, Physics, Rhetoric, U. S. History, and Botany, and either Astronomy, Civil Government or General History.*

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Botany (53) Systematic and Physiological.	4.	Botany (56) (½ Semester) Medical.	1.
Latin (59) Pharmaceutical.	5.	Latin (60) Pharmaceutical.	5.
Physics (53) Mechanics, Heat, etc.	3.	Physics (54) Electricity, Magnetism, etc.	3.
		Physics (60) Laboratory.	2.
		Physiology (58) (½ Semester) Microscopy.	1.
Rhetoric (51) English Composition.	2½.	Rhetoric (52) English Composition.	2½.
Zoology (51) Comparative.	3.	Zoology (52) Comparative.	3.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

SECOND YEAR

French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physiology (51) Human Anatomy.	3.	Physiology (52) Physiology.	3.
Rhetoric (63) Advanced Rhetoric.	2.	Rhetoric (64) Advanced Rhetoric.	2.
Zoology (55) Comparative Anatomy.	5.	Zoology (56) Comparative Anatomy.	5.
Cadet Service (men). Hygiene and Phys. Train. (women).		Cadet Service (men). Hygiene and Phys. Train. (women).	

THIRD YEAR

French (53) Science Reading or German (53) Science Reading.	2.	French (54) Science Reading or German (54) Science Reading.	2.
Economics (51) Political Economy.	4.		
Philosophy (53) Psychology.	3.	Philosophy (54) Logic and Ethics.	3.
Pharmacy (51) General.	3.	Pharmacy (52) General Laboratory.	3.
Physiology (55) Laboratory.	5.	Physiology (56) Laboratory.	5.

THE COLLEGE OF ENGINEERING

FOR ADMISSION TO THE FOUR-YEAR COURSES, AND TO THE COURSE IN ARCHITECTURE

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English* (*a*) — Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from the list of classics printed below.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises — paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition — Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in four types — description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below, and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics — Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro and Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic class-room study of the texts themselves is the only adequate preparation. Literary history,

literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra* — Taylor's Academic or equivalent.
4. *Civil Government* — Fiske or Thorpe preferred.
5. *Geometry, Plane and Solid* — Venable, Wentworth, White, or Wells.
6. *History* — Myers's General History.
7. *Latin* — Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential), Cæsar, the first four books of the *De Bello Gallico.*

Or *French* — The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German* — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the year 1899-1900 the German or French required for admission may be begun at the University, but without University credits.

8. *Physics* — Gage, Carhart and Chute, Avery or Appleton, complete.

NOTE — An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

No student will be admitted to the College of Engineering who is in arrears more than fifteen hours, of which not more than five hours may be in Mathematics.

COURSE IN CIVIL ENGINEERING

This course is arranged for students expecting to become surveyors or civil engineers. The plan of the course is to give (1) a thorough training in mathematics and mechanics, (2) the general principles underlying all branches of civil engineering, (3) the application of the general principles to the several branches of civil engineering. The subjects of land, railroad and topographical surveying are important features, and students can at once begin practical work. In the engineering work special attention is given to iron and steel bridge work, masonry construction and cement testing, road and railroad building and maintenance, water supply and the subject of the collection and disposal of sewage.

FIRST YEAR

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Civil Engineering (1) Surveying.	6.	Civil Engineering (4) C. E. Drawing.	4.	Civil Engineering (2) Surveying.	6.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	5.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Space Analy. & Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SUMMER COURSE

Civil Engineering (22). Four weeks — six days per week. Field work in surveying and railroad construction.

THIRD YEAR

Civil Engineering (8) Surveying.	4.	Civil Engineering (5) C. E. Drawing.	3.	Astronomy (2) Mathematical.	4.
Mathematics (8) Least Squares.	2.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (7) Bridge Strains.	5.
Geology (2) General.	5.	Geology (2) General.	5.	Drawing (7) Photography.	2.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

SUMMER COURSE

Civil Engineering (23). Four weeks — six days per week. Field work in railroad and topographic surveying.

FOURTH YEAR

Astronomy (2) Mathematical.	4.	Civil Engin'g (16) or (17) Masonry, Railways.	5.	Civil Engineering (10) Sanitary Engineering.	5.
		Civil Engineering (14) Testing Laboratory.	2.	Law of Contracts	4.
Civil Engineering (8) Bridge Designing.	5.	Civil Engineering (18) Water Supply.	5.		
Civil Engineering (15) Masonry.	5.	Elec. Engineering.		Geology (3) Economic.	3.
Elec. Engineering.		Lectures (6)	2.		
Lectures (6)	2.	Laboratory (7)	2.		
Laboratory (7)	2.	Mech. Engineering (17) Laboratory.	3.	Mech. Engineering (25) Laboratory.	3.

*VOLUNTARY

* French (3), two hours; or German (2), two hours; or Rhetoric (4), two hours; each for the year.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Civil Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MINE ENGINEERING

This Course is arranged for students intending to become mining engineers and surveyors, metallurgical or technical chemists. The plan of work, therefore, while keeping mathematics, drawing and engineering prominent, also provides extended work in applied chemistry, chemical analysis, assaying, mineralogy, geology, and surveying with especial application to mines and underground work, while the treatment of ores, both mechanical in ore dressing and chemical in metallurgy, forms an important feature.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3
Shopwork (7) Carpentry and Pattern-making.	2.	Shopwork (11) Forging.	2.	Shopwork (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (8)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel, Copper, Gold, etc.	5.	Civil Engineering (19) Bridge Strains.	5.
Mine Engineering (4) Mine Surveying.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (8) Deter. Mineralogy.	5.
Rhetoric (8) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

FOURTH YEAR

Elec. Engineering.		Elec. Engineering.		Geology (3) Economic.	5.
Lectures (6)	2.	Lectures (6)	2.		
Laboratory (7)	2.	Laboratory (7)	2.		
Geology (2) General.	5.	Geology (2) General.	5.	Mine Engineering (6) Plans and Specifications.	5.
Mine Engineering (5) Mine Engineering.	5.	Metallurgy (7) Metal. Construction.	3.	Mine Engineering (5) Mine Engineering.	5.
Metallurgy (8) Ore Dressing.	2.	Mine Engineering (5) Mine Engineering.	5.	Drawing (7) Photography.	2.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Metallurgy or of Mine Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MECHANICAL ENGINEERING

This Course has for its object the qualifying of men for the mechanical engineering profession. It aims to embrace preparation for such lines of pursuit as the successful management of machinery in manufacturing establishments; the superintendence of construction; the designing and laying out of machinery plants for mills and factories; the construction of machines for particular purposes, and the designing and drawing of the same, the making of calculations respecting strength, shocks, proportion, endurance, and suitability of material for specific purposes.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shopwork (7) Carpentry & Pat'n Mak'g	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descr. Geometry.	3.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (11) Forging.	3.	Physics (7) Laboratory.	2.	Physics (7) Laboratory.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (3) Foundry.	2.	Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine work.	3.
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Drawing (5) Technical.	3.	Mech. Engineering (6) Mechanics.	5.	Drawing (7) Photography.	2.
Mathematics (11) Differential Equations.	1.	Mech. Engineering (22) Timber and Masonry.	3.	Civil Engineering (19) Bridge Strains.	5.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (3) Mechanism.	5.	Mech. Engineering (7) Strength of Materials.	5.
Metallurgy (4) Fuels and Iron.	3.	Metallurgy (4) Steel.	2.		
Shopwork (14) Machine Work.	3.	Shopwork (15) Advanced Machine Work.	4.	Mech. Engineering (8) Mechanism.	2.
Mech. Engineering (12) Laboratory.	2.			Industrial Arts (6) Machine Design.	5.

FOURTH YEAR

Elec. Engineering. Lectures (6)	2.	Elec. Engineering. Lectures (6)	2.	Industrial Arts (5) Shop Appliances.	3.
Laboratory (7)	2.	Laboratory (7)	2.		
Mech. Engineering (13) Laboratory.	4.			Mech. Engineering (10) Steam Boilers.	5.
Mech. Engineering (8) Thermodynamics.	5.	Mech. Engineering (9) Prime Movers.	5.	Mech. Engineering (15) Laboratory.	3.
		Mech. Engineering (14) Laboratory.	4.	Mech. Engineering (20) Hydraulic Mach.	2.
Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (21) Thesis Work.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Mechanical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel, Copper, Gold, etc.	5.	Civil Engineering (19) Bridge Strains.	5.
Mine Engineering (4) Mine Surveying.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (8) Deter. Mineralogy.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

FOURTH YEAR

Elec. Engineering.		Elec. Engineering.		Geology (3) Economic.	5.
Lectures (6)	2.	Lectures (6)	2.		
Laboratory (7)	2.	Laboratory (7)	2.		
Geology (2) General.	5.	Geology (2) General.	5.	Mine Engineering (6) Plans and Specifications.	5.
Mine Engineering (5) Mine Engineering.	5.	Metallurgy (7) Metal. Construction.	3.	Mine Engineering (5) Mine Engineering.	5.
Metallurgy (8) Ore Dressing.	2.	Mine Engineering (5) Mine Engineering.	5.	Drawing (7) Photography.	2.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Metallurgy or of Mine Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MECHANICAL ENGINEERING

This Course has for its object the qualifying of men for the mechanical engineering profession. It aims to embrace preparation for such lines of pursuit as the successful management of machinery in manufacturing establishments; the superintendence of construction; the designing and laying out of machinery plants for mills and factories; the construction of machines for particular purposes, and the designing and drawing of the same, the making of calculations respecting strength, shocks, proportion, endurance, and suitability of material for specific purposes.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shopwork (7) Carpentry & Pat'n Mak'g	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descr. Geometry.	3.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (11) Forging.	3.	Physics (7) Laboratory.	2.	Physics (7) Laboratory.	2.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (3) Foundry.	2.	Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine work.	3.
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Drawing (5) Technical.	3.	Mech. Engineering (6) Mechanics.	5.	Drawing (7) Photography.	2.
Mathematics (11) Differential Equations.	1.	Mech. Engineering (22) Timber and Masonry.	3.	Civil Engineering (19) Bridge Strains.	5.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (3) Mechanism.	5.	Mech. Engineering (7) Strength of Materials.	5.
Metallurgy (4) Fuels and Iron.	3.	Metallurgy (4) Steel.	2.		
Shopwork (14) Machine Work.	3.	Shopwork (15) Advanced Machine Work.	4.	Mech. Engineering (3) Mechanism.	2.
Mech. Engineering (12) Laboratory.	2.			Industrial Arts (6) Machine Design.	5.

FOURTH YEAR

Elec. Engineering. Lectures (6)	2.	Elec. Engineering. Lectures (6)	2.	Industrial Arts (5) Shop Appliances.	3.
Laboratory (7)	2.	Laboratory (7)	2.		
Mech. Engineering (13) Laboratory.	4.			Mech. Engineering (10) Steam Boilers.	5.
Mech. Engineering (8) Thermodynamics.	5.	Mech. Engineering (9) Prime Movers.	5.	Mech. Engineering (15) Laboratory.	3.
		Mech. Engineering (14) Laboratory.	4.	Mech. Engineering (20) Hydraulic Mach.	2.
Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (21) Thesis Work.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Mechanical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ELECTRICAL ENGINEERING

The object of this Course is to prepare students for the various pursuits in which the applications of electricity are prominent. Physics, especially theoretical and applied electricity, and mechanical engineering are naturally the leading subjects of the Course. General theory is treated in ample breadth, and is tested by experiments in well equipped laboratories. The laboratories are so conducted as to afford the student a degree of facility in the use of instruments and machinery only acquired by continued practice.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shop Work (7) Carpentry & Pat'n Mak'g	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shade, Shadows and Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (11) Forging.	2.	Physics (5) Laboratory.	4.	Physics (5) Laboratory.	4.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (4) Chipping and Filing.	2.				
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Drawing (5) Technical.	3.	Mech. Engineering (3) Mechanism.	5.	Industrial Arts (6) Machine Design.	5.
Mathematics (11) Differential Equations.	4.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (16) Laboratory.	4.
Mech. Engineering (6) Mechanics.	5.	Physics (6) Laboratory.	5.	Mech. Engineering (7) Strength of Materials.	5.
Physics (6) Laboratory.	3.	Shopwork (14) Machine Work.	3.	Physics (6) Laboratory.	5.
Physics (4) Electricity & Magnetism.	3.				
Shopwork (13) Machine Work.	3.				

FOURTH YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Elec. Engineering (2) Elec. Machinery.	5.	Elec. Engineering (2) Elec. Machinery.	5.	Elec. Engineering (2) Elec. Machinery.	5.
Elec. Engineering (3) Designing and Drawing.	3.	Elec. Engineering (3) Designing and Drawing.	3.	Elec. Engineering (3) Designing and Drawing.	3.
Elec. Engineering (4) Laboratory.	5.	Elec. Engineering (4) Laboratory and Thesis.	5.	Elec. Engineering (4) Laboratory and Thesis.	5.
Mech. Engineering (8) Thermodynamics.	5.	Mech. Engineering (9) Prime Movers.	5.	Mech. Engineering (10) Steam Boilers.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the result of a special study. The subject of such study must lie within the field of Electrical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CERAMICS

This Course is designed to create a class of engineers who shall be fitted to render to the Clay, Glass and Cement Industries, the same kind of services which have long been rendered to Mining and Metallurgical Industries by graduates of Schools of Mines.

The problems of the Ceramic Industries are not unlike those of the Mining Industries, either in kind or in adaptation to methods of technical control; but the information and scientific equipment necessary to solve these problems successfully are peculiar to those industries alone, and in the past have received little or no attention from technical schools in this country.

This course is offered with the hope of filling this long standing gap in the scheme of engineering education in this country. It is essentially an Engineering Course, following closely the lines of the other engineering courses, up to the end of the second year. In the last two years, the training specializes along the lines of Ceramics and of the application of Chemistry to this subject.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
German (1) or (4)	4.	German (1) or (4)	4.	German (1) or (4)	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Ceramics (1) Laboratory.	5.	Ceramics (2) Laboratory.	5.	Ceramics (3) Laboratory.	5.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Analytics and Calculus.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Shopwork (7) Woodwork.	2.	Shopwork (11) Forging.	2.	Shopwork (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each through the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Ceramics (4) General Principles.	5.	Ceramics (5) Bricks.	5.	Ceramics (6) Pottery.	5.
Mine Engineering (4) Mine Surveying.	5.	Ceramics (7) Advanced Chemical Laboratory Work.	5.	Ceramics (8) Advanced Chemical Laboratory Work.	5.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength of Materials.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

FOURTH YEAR

Ceramics (9) Manufacture of Bodies.	5.	Ceramics (10) Glasses and Glazes.	5.	Ceramics (11) Enamels and Colors.	5.
Drawing (7) Photography.	2.	Ceramics (12) Cement.	5.		
Geology (2) General.	5.	Ceramics (13) Ceramic Construction.	2.	Ceramics (15) Thesis Work.	5.
Metallurgy (4) Fuels and Iron.	5.	Ceramics (14) Reports on Clay Prop.	5.	Geology (3) Economic.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Ceramic Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN INDUSTRIAL ARTS

This course is designed to furnish a strong basis for those wishing to become teachers of Manual Training, and for those intending to enter the various branches of manufacture and industry, not as engineers, but as practical managers, superintendents or business men. The required part of the course combines with a general science training a large amount of drawing and shop work, in which the underlying principles and methods employed in various branches of industry are

dwelt on. Large liberty of election of studies is allowed the student. His election, properly exercised, together with the required work will equip the student for a wide range of occupations along the lines stated. The aim of the course is educational as well as professional, the training of the mind and hand together.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Shopwork (7) Carpentry and Pattern Making.	3.	Shopwork (8) Carpentry Cabinet Work.	3.	Shopwork (9) Advanced Pattern Making.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows & Per.	3.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity.	3.	Physics (2) Sound and Light.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (3) Foundry.	3.	Shopwork (11) Forging.	3.	Shopwork (12) Advanced Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives, six to eight hours — any work upon which the student is qualified to enter, in any College except the College of Law.

THIRD YEAR

Drawing (5) Technical.	3	Industrial Arts (2) Technical Drawing.	3.	Industrial Arts (2) Technical Drawing.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine work.	3.	Shopwork (14) Machine work.	3.

Electives, eight to ten hours — any work upon which the student is qualified to enter, in any College except the College of Law.

FOURTH YEAR

Industrial Arts (3) Shop Equipment.	3.	Industrial Arts (3) Shop Appliances.	3.	Industrial Arts (3) Shop Management.	3.
Industrial Arts (4) Technical Drawing.	3.	Industrial Arts (4) Technical Drawing.	3.	Industrial Arts (4) Technical Drawing.	3.
Shopwork (15) Advanced Machine Work.	3.	Shopwork (16) Advanced Machine Work.	3.	Shopwork (17) Advanced Machine Work.	3.

Electives, eight to ten hours — any work upon which the student is qualified to enter, in any College except the College of Law.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special study. The subject of such study must

lie within the field of Industrial Arts. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CHEMISTRY

The object of this Course is to prepare students for work in Industrial Chemistry or Metallurgical Chemistry, according to electives chosen. With proper electives it will also be found a desirable course for students expecting to become general analytical chemists.

The electives are subject to the approval of the head of the department of Chemistry, or of Metallurgy and Mineralogy for students in Metallurgical Chemistry.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Inorganic.	5.
German (1) or (4)	4.	German (1) or (4)	4.	German (1) or (4)	4.
Mathematics (14) Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Chemistry (4) Quantitative.	5.	Chemistry (4) Quantitative.	5.	Chemistry (4) Quantitative.	5.
German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (7) Woodwork.	3.	Shopwork (11) Forging.	3.	Metallurgy (2) Mineralogy.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives three to five hours throughout the year.

The following are suggested: Mathematics (18, 19, 20), 5 hours; Drawing (3), 3 hours; Physiology (3), 3 hours; History (5), 4 hours; Economics (1), 4 hours.

THIRD YEAR

Chemistry (8) Organic.	5.	Chemistry (9) Organic.	5.	Chemistry (9) Organic.	5.
Metallurgy (5) Laboratory.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (5) Laboratory.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

Electives five to eight hours throughout the year.

The following are suggested: Physical Laboratory, 3 to 5 hours; Geology, 5 hours — or Geology and Determinative Mineralogy, 5 hours; Shopwork, 3 hours.

FOURTH YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (17) Inorganic Preparations.	4.	Chemistry (14) Theoretical.	3.	Chemistry (15) Sanitary.	4.
Metallurgy (4) Fuels and Iron.	5.	Chemistry (16) Applied.	3.	Ceramics (16) Applied.	3.
		Physiology (8) Bacteriology.	2.		

Electives to make the total work equal sixteen or eighteen hours, including thesis work.

Students in Metallurgical Chemistry will take Ore Dressing the first term, and Metallurgy (4) 5, through the second term. For such students Chemistry (14, 15, 16) and Physiology (8) will not be compulsory.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of the study must lie within the field of Chemistry or Metallurgy. The subject must be announced to the President of the University (dependent upon the approval of the head of the department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ARCHITECTURE

This Course was established in 1896, to meet a growing demand for special training along this line. The extremely rapid developments, in late years, of novel methods of construction, the constantly extending list of materials used, and the creations of types of buildings entirely without precedent in the history of architecture, render it not only desirable, but imperative, that a large class of thoroughly trained and equipped men shall be brought forward, if this progress is to be maintained.

The employment in architecture of so many young men trained in other branches of engineering seems to prove the urgent need of those whose training is directed expressly to this end.

The Course offered gives a good training in mathematics, physics and mechanics, which are fundamental, together with a thorough drill in drawing, designing, shopwork, and the more technical branches of architecture proper.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Drawing (1) Freehand.	3.	Drawing (1) Freehand.	3.	Drawing (1) Water Color.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Drawing (2) Lettering.	3.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Shop Work (7) Carpentry and Pattern Making.	3.	Shop Work (8) Carpentry Cabinet Work.	3.	Shop Work (10) Carpentry Building.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (7) Photography.	2.	Architecture (1) Orders.	5.	Architecture (2) Styles.	5.
Drawing (8) Projections.	3.	Drawing (8) Descriptive Geometry.	5.	Drawing (3) Shades, Shadows & Per.	5.
Drawing (14) Pen.	2.	Drawing (12) Clay Modeling.	2.	Drawing (12) Clay Modelling.	2.
Greek (1) Ancient Art.	2.	Greek (1) Ancient Art.	2.	Greek (1) Ancient Art.	2.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Mechanical Eng. (23) Materials of Construct'n.	5.				
Cadet Service.		Cadet Service.		Cadet Service.	

THIRD YEAR

Architecture (3) Designing.	5.	Architecture (3) Designing.	5.	Architecture (3) Designing.	5.
Architecture (4) Specifications.	2.	Architecture (5) Decorations.	3.	Architecture (6) Estimates.	4.
Civil Engineering (15) Masonry.	5.	Architecture (7) Heating.	5.	Architecture (8) Designing.	5.
Civil Engineering (20) Roof Trusses.	5.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (21) Surveying.	3.

REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES IN MINING, IN CLAY-WORKING AND CERAMICS, AND IN INDUSTRIAL ARTS

Applicants must not be less than sixteen years of age; and unless they are over twenty-one years of age must pass an examination in Arithmetic, Geography, Grammar and Orthography, or bring High School or other certificates for these branches.

Applicants who are over twenty-one years of age are admitted without examination.

SHORT COURSE IN MINING

The Short Course in Mining is especially designed for young men who have had a practical experience in mines, and wish to study Mine Surveying, Drafting, the problems of Ventilation, Drainage, Haulage, Mine Operating, etc., and also something of the sciences bearing upon their work, but have neither the time nor the preparation for a full college course. The first year is devoted to a thorough study of the elementary mathematics and sciences necessary to prepare the student for the practical work of the second year. The experience of the past eight years has shown beyond any doubt that any enterprising young miner can master the subject sufficiently well in the time assigned to materially increase his earning capacity and chances for promotion in his occupation.

Personal instruction is given, and it is made thoroughly practical and of such a character as to best adapt it to the needs of the individual student.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Space Geometry.	5.	Mathematics (14) Trigonometry.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (1) Freehand.	2.	Drawing (4) Draughting.	3.	Drawing (2) Lettering.	2.
Drawing (3) Projections.	3.	Geology (4) Elementary.	5.	Metallurgy (9) Mineral Chemistry.	5.
Chemistry (7) Inorganic.	5.	Chemistry (13) Laboratory.	3.	Mine Engineering (3) Mine Operating.	5.
Mine Engineering (1) Mine Surveying.	5.	Mine Engineering (2) Ventilation and Haulage.	5.	Shop Work (11) Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SHORT COURSE IN CLAY-WORKING AND CERAMICS

The two-year or Industrial Course is designed to assist young men who have already been actively engaged in the Ceramic industries, and who, on account of mature years, or lack of means, or lack of previous educational advantages, are unable to avail themselves of the full and complete course, and yet who wish to increase their earning power or chances of promotion by fitting themselves for other than routine labor. The requirements for admission to this course are very low, and the work required throughout is much less severe than that of the four-year course; in fact, anyone who is willing to really apply himself, can retain his membership in this class, but there is no place for any but those who are thoroughly in earnest, and poor work will not be accepted from those who are able to do good work.

In short, in this Industrial Course, the department recognizes its closest medium of communication with the wants of the clay industries, and it is intended to so maintain this course as always to render the greatest good to the greatest number.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Analytical.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Mathematics (1) Algebra.	5.	Mathematics (3a) Plane Geometry.	5.	Shop Work (11) Forging.	3.
				Shop Work (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Ceramics (1) Analysis of Limestones, etc.	5.	Ceramics (2) Analysis of Clays.	5.	Ceramics (3) Analysis of Glazes.	5.
Ceramics (4) Gen. Principles.	5.	Ceramics (5) Bricks.	5.	Ceramics (6) Pottery.	5.
Geology (2) General.	5.	Drawing (11) Mechanical.	5.	Geology (3) Economic.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

SHORT COURSE IN INDUSTRIAL ARTS

This Course is primarily designed to extend the benefits of the same kind of training as that given in the four-year course in this subject to that class of young men who may be unable for any reason to undertake a course of four years' duration, but who aspire to become actively engaged in factory work. It has been the aim to give, in as condensed a form as possible, those studies which will most rapidly and easily be turned to practical account in manufacturing operations; such as drawing, shop work, use of machine, tools, etc., together with a grounding in the physics and mathematics which underlie these operations.

The Course will be found most valuable to young men already engaged in factory work, who find themselves limited from rising in their work on account of lack of technical education.

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.
Drawing (8) Geometric.	2.	Drawing (8) Projections.	2.	Drawing (2) Lettering.	2.
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Space Geometry.	5.	Mathematics (14) Trigonometry.	5.
Shopwork (7) Carpentry and Pattern Making.	3.	Shopwork (8) Carpentry Cabinet Work.	3.	Shopwork (11) Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (8) Projections.	3.	Drawing (3) Descriptive Geometry	3.	Drawing (3) Shades, Shadows & Per.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Phys. Geography.	5.
Shopwork (3), (4) Foundry and Chipping and Filing.	5.	Shopwork (13) Machine Work.	5.	Shopwork (15) Advanced Machine Work.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

THE COLLEGE OF LAW

FOR ADMISSION

(Until September, 1901)

The following are the requirements:

1. *To the First Year* — Applicants for admission to the First Year must present satisfactory evidence (by teacher's certificate — High School, Academy or College diploma — or by examination) of having a good common school education, including *United States History, Civil Government* and a thorough training in *English Composition.*

2. *The Second Year* — In addition to the requirements for admission to the First Year, applicants for admission to the Second Year must present satisfactory evidence of having completed the work of the First Year or its equivalent.

3. *To the Third Year* — In addition to the requirements for admission to the Second Year, applicants for admission to the Third Year must present satisfactory evidence of having completed the work of First and Second Years, or its equivalent.

Students seeking a degree must, at the time of registration, present in addition to the requirements above mentioned satisfactory evidence of having completed a course of study, the minimum requirement of which is as follows:

Arithmetic, Civil Government, Geography, Grammar, History of the United States, Physical Geography, Physiology, Rhetoric, Physics, (Gage or an equivalent) *Geometry, Algebra,* (Wentworth's elements or an equivalent); and, in addition, the equivalent of 75 hours per week for one term of 12 weeks (a total of 900 hours) chosen from any five or more of the following subjects, one at least being a Science and two at least being in History or Political Science (unless the applicant is especially permitted to offer approved substitutes): *Botany, Chemistry, English Constitutional History, English History, English Literature, French, Geology, General History, German, Greek, Latin, Logic, Physics, Political Economy, Psychology, Surveying, Trigonometry, United States Constitutional History; provided,* that not less than 65 hours for twelve weeks (a total of 780 hours) of this work shall be of collegiate or university grade. If this last mentioned work has been done by the candidate in a College or University of good standing, certificates of such institution will be accepted. In all other cases the candidate is subject to examination on the work required from this last group. In general, in the absence of satisfactory certificates, opportunity will be given for examination in any subject required for admission as above indicated. Blanks for applications for degrees will be furnished on request.

FOR ADMISSION[1]

(On and after September, 1901)

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English* (*a*) — Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from the list of classics printed below.

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises — paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition — Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in four types — description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below, and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics — Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro and Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words, phrases and figures; to reproduce thought, to point out characteristics of style. Systematic class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra* — Taylor's Academic or equivalent.

4. *Botany* — Kellerman's Elementary Botany and Spring Flora.

5. *Civil Government* — Fiske or Thorpe preferred.

6. *Geometry, Plane and Solid* — Venable, Wentworth or Wells.

7. *History* — Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.

8. *Physics* — Carhart and Chute, Gage, Avery, or Appleton.

9. Any two of the following languages, in the quantity indicated below. Latin, Greek, French or German, or any one of them and the group of subjects named under (*e*) below.

(*a*) *Latin* — Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Aeneid*, with Prosody; Prose Composition, Daniell or Collar or Jones, entire.

(*b*) *Greek* — Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first four books of Xenophon's *Anabasis*. At least two years should be devoted to this work.

(*c*) *French* — The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

(*d*) *German* — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

(*e*) While the preferred requirement is that each candidate shall offer any two of the foregoing languages, he will be permitted to offer in place of one of the two the following group:

1. *Chemistry* — Williams' or Remsen's.
2. *Physiology* — Martin's (briefer course).
3. *English Literature* — Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, *English History* — Montgomery.

In addition to the foregoing requirements for admission to the work of the College, *each candidate for a degree* must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts, Philosophy and Science, of this University. Where this work has been done in a college or university of approved standing, the certificate of said college or university will be accepted. In all other cases the candidate will be subject to examination in such work.

COURSE IN LAW

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Elementary Law (including Domestic Relations)	15	Agency	2
		Contracts	4
		Criminal Law	8
		Sales	2
		Torts	4
	15		15

TEXT BOOKS

First Semester — Elementary Law (Robinson, Walker and Blackstone).

Second Semester — Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Bailments	4	Construction of Contracts	2
Commercial Law	4	Evidence	2
Evidence	2	Partnership	2
Pleading	4	Pleading	2
Moot Court	1	Real Property	4
		Wills	2
		Moot Court	1
	15		15

TEXT BOOKS

First Semester — Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

Second Semester — Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

THIRD YEAR

Circuit and Supreme Court Practice	1	Corporations (Private)	2
Constitutional Law / International Law	4	Corporations (Municipal), Negligence of	2
Corporations (Private)	2	Ethics	1
Corporations (Municipal)	2	Federal Practice	2
Equity Jurisprudence	4	Insurance	2
Probate Law	2	Mortgages / Suretyship	2
Moot Court	1	Trial Practice	2
		Moot Court	1
	16		14

Thesis for graduation to count for two hours through second semester.

TEXT BOOKS

First Semester — Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Fetter).

Second Semester — Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones); Suretyship (Baylies).

PURPOSE AND METHODS

It is the purpose of this College to furnish such legal training as will secure the most favorable judgment of the profession, and such as will fit students for practice in any part of the country.

The aim is to teach an accurate knowledge of the principles of the law, and to illustrate the application of these principles to the practical affairs of life — to teach students both to know and to apply the law. The instruction offered includes a Course containing three years of nine months each. It requires about fifteen hours of lecture and recitation work per week each year, and embraces all the elementary and practical studies necessary for admission to the Bar of any State administering the Common Law.

The methods of instruction combine the advantages of all approved systems and appliances — the text-book and recitation system, the lecture system, and the case system. Charts, outlines, analyses, essays, note-taking, oral and written lectures, reviews and examinations are used; and exercises are given in drafting contracts, abstracts, conveyances, wills, protests, mercantile contracts, pleadings, indictments, and other legal papers. Briefs, arguments in moot courts, etc., are required. Attention is given to the study and accurate analysis of leading cases.

GENERAL REGULATIONS

IRREGULAR STUDENTS

In special cases, students who have had part of the studies of the First Year and part of those of the Second Year, or part of those of the Second Year and part of those of the Third Year, may be examined on whatever subjects they may select and may take part of the studies of both years, if the Faculty is satisfied that the applicants can do so to advantage. If candidates for a degree, such applicants must meet all the other requirements and have all the other qualifications of those seeking a degree.

SPECIAL STUDENTS

Persons wishing a knowledge of legal principles *for business purposes only*, but not intending to apply for a degree or to take a full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem expedient. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitation, etc., with the Dean.

ENTRANCE EXAMINATIONS

Entrance examinations, except for those seeking a degree, will not be technical; the object being to ascertain the results of previous training and practical capacity to appreciate the technical study of the law. All entrance examinations will be conducted in writing.

APPLICATIONS FOR DEGREES

At the time of registration all applicants who seek degrees should present their diplomas and certificates of work done. These certificates should state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate in it. A copy of the course of study should accompany the certificate in all cases, and must accompany it where equivalents are offered. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request.

EXAMINATIONS

Examinations are held from time to time to test the student's knowledge of the work he has gone over. They are usually written, but sometimes oral.

THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, at least six weeks before the end of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with the approval of the professor giving instruction in that division of law from which the subject is chosen.

DEGREES

The degree of Bachelor of Laws (LL. B.) will be conferred on all who, being at least twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least one year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other approved University or College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis; the subject of which has been chosen from the field included in the Graduate year.

CERTIFICATES OF WORK DONE

Those who have completed the studies of the College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

ADMISSION TO THE BAR

The regular Supreme Court examination for the admission to the bar is held on the first Tuesday in June of each year. Seniors, if eligible, are recommended to take this examination.

COURSE OF INSTRUCTION

The Course of Study is three years of nine months, or thirty-six weeks, each; covering about fifteen hundred hours of work. It is so arranged that each class will have an average of three recitations a day, each one hour in length, thereby doing the same amount of work that is done in a regular University course.

MOOT COURT

Second Year and Third Year students will have Moot Court, under the supervision of the Dean, throughout the year, not less than one hour each week. The object of Moot Court is to give practical insight into the conduct of trials, examination of witnesses, production of evidence, etc.

ADVANTAGES

LOCATION

Attention is called to Columbus as a place in which to study law. Here the Legislature meets. Here are the Supreme Court and Circuit Court; four branches of the Common Pleas Court, in almost daily session throughout the college year; the Probate Court, the County Commissioners, the City Court, the several Magistrates' Courts; also the U. S. Circuit and District Courts. All are easy of access from the College. "There is no place where law is learned so quickly and thoroughly as among the lawyers. No teaching is so effective as the object lessons of the trial of cases in court."

LIBRARIES

The following libraries are accessible to the student:

The Law Library of the College contains the Noble Law Library, the Emerson McMillin Law Library, the Critchfield Law Library, and three sets of the Ohio and the Ohio State Reports; about 2,500 well selected volumes. It is shelved with the other Libraries of the University, in Orton Hall.

The University Library contains 25,000 volumes of very carefully selected books upon all subjects. This is quite complete in the more recent standard works upon history and political science, philosophy, etc. A good collection of the leading scientific, technical and literary magazines and journals is to be found here.

The State Law Library, of about 15,000 volumes — the largest and most complete Law Library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States, and State Reports, Statutes and Digests, as well as all the important text books and leading periodicals published. This library is located in the State House, and because of the small space available must be used with great care and discretion in order that all may be served. It is designed wholly for reference, and students are warned that they must not use the library rooms as a study room, and that the text books found here are to be used for reference only. No student is expected, nor will he be permitted, to use these books instead of providing himself with those required in the course.

The State Library, in the State House — a library of general literature, history, science, biography, political and social science, philosophy, etc., comprising some 65,000 volumes. The leading magazines, journals, etc., are also to be found here.

The University Libraries are open from 7:30 A. M. to 9:30 P. M. during the five days in which the University is in session, and on Saturdays from 8 A. M. to 4 P. M. The State Law Library is open six days in the week, from about 8:30 A. M. to 5:30 P. M., with the exception of about an hour or an hour and a half at noon. The State Library is open six days in the week from 9 A. M. to 12 M., and from 2 P. M. to 5 P. M.; and when the Legislature is in session, from 7 P. M. to 9 P. M.

The City Library may also be used by students, under reasonable restrictions.

THE UNIVERSITY COURSES

Attention is called to the great advantage of attending a law school in close and vital connection with the University affording the means of a liberal, practical and technical education. Students who are disposed to work faithfully may, at the same time that they are acquiring a technical knowledge of the law, supplement their general education by joining University classes, in departments which they may elect, subject to the requirements for admission to such departments, without extra charge except for laboratory work. Not alone from the courses in History and Political Science, or from those in Mental and Moral Philosophy, should this work be selected, but also from the courses in Civil, Mine, Mechanical, and Electrical Engineering, from the courses in Anatomy and Physiology, Economic Geology, etc. To the average practitioner, there will come ten questions involving the principles of surveying or engineering to one of the constitutional law or English history. Not a day passes in the litigation of the courts but that numerous questions of anatomy, physiology, surveying or engineering arise and are to be decided. Particular attention, therefore, is called to the technical courses offered by the University, which will be open to those in the College of Law who are able to take them without interfering with the required law work. The following departments offer courses which will prove beneficial to those who have not had

such training as would enable them to take more technical work: Botany, Physiology, Physics, Civil Engineering, Mine Engineering, Chemistry (Toxicology), Geology, Philosophy, History, English.

EXPENSES

Each student of the University is required to pay an incidental fee of fifteen dollars a year, and in this College a tuition fee of forty-five dollars; a total of thirty dollars for each semester, which is payable at the beginning of each semester.

A fee of five dollars (to cover the expenses of graduation, diplomas, etc.,) is charged to all who take the degree of Bachelor of Laws, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred.

Good boarding and lodging, convenient to the University, can be obtained at from $3.50 to $5.00 per week.

For information as to the cost of text-books used, address L. T. Williams, Ohio State University, Columbus.

Please send names and addresses of law students, and requests for printed matter, to W. F. Hunter, Dean, 18 Board of Trade, Columbus, Ohio; or to the Executive office, Ohio State University, Columbus.

THE COLLEGE OF PHARMACY

FOR ADMISSION TO THE FOUR-YEAR COURSE[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English* (*a*) — Composition and Rhetoric. Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience. The second essay will be upon a subject drawn from the list of classics which will be furnished on application.

The proper preparation for this requirement is sustained and regular practice in writing. The pupil should be afforded weekly practice in preparing written exercises — paragraphs, outlines, themes, reproductions and abstracts; and his written work should be corrected by the teacher and revised and rewritten by himself. Scott and Denney's Composition — Rhetoric is recommended as a guide for this work.

The pupil should be familiarized with those principles of Rhetoric which are most likely to help him in his composition work; such as the principles of sentential structure, outlining, paragraphing, and choice of words. The study of specimens of bad English is not recommended; the time usually devoted to this may be better spent in memorizing and reciting notable passages of prose and poetry selected from works read entire by the class. Exercises in speaking from a topical outline previously prepared by the class are recommended for drill in expression and choice of words.

The subjects for the weekly written exercises should be so distributed that the pupil will have practice in four types — description, narration, exposition and argumentation. Some of these subjects should be taken from the classics prescribed below, and other classics, preferably by the same authors, prescribed for parallel or subsidiary outside reading by the class; but fully one-half of the subjects upon which the pupil writes during the preparatory course should be drawn from his own observation and experience, especially subjects in description and narration.

(*b*) English Classics — Questions will be set for the purpose of testing the applicant's knowledge of the subject-matter, form and substance, of the following books; with the plot, purpose, literary style and peculiarities, incidents, and characters of which the applicant should make himself thoroughly familiar.

1899. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Lowell's *The Vision of Sir Launfal;* Hawthorne's *The House of Seven Gables.*

1900. Chaucer's *The Knight's Tale*, or Dryden's *Palamon and Arcite;* Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I, VI, XXII and XXIV; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Macaulay's *Essay on Milton;* Burke's *Conciliation with the Colonies.*

1901. *Macbeth;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* Milton's *Comus, Lycidas, L'Allegro and Il Penseroso;* Scott's *Ivanhoe;* Goldsmith's *The Vicar of Wakefield;* Tennyson's *Princess;* Coleridge's *The Ancient Mariner;* Lowell's *The Vision of Sir Launfal.*

These or equivalent texts will require minute and critical study in class during at least one school year. The test here is the pupil's ability to analyze plot and character; to explain words,

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up his work in the Columbus High Schools, which are fully accredited by the University.

phrases and figures, to reproduce thought, to point out characteristics of style. Systematic class-room study of the texts themselves is the only adequate preparation. Literary history, literary biography and the comments of professional critics will not serve the purpose. The work in class should be intensive and disciplinary; there the distinction between the reading of literature and the study of classics should be sharply defined. Outside reading of other works preferably by the same authors, is recommended, and should be prescribed as the basis of part of the composition work; but this general reading and composition work should not be regarded as an adequate substitute for the minute study of the few classics prescribed above, and will not be accepted as preparation for this part of the English requirement.

3. *Algebra* — Taylor's Academic or equivalent.
4. *Botany* — Kellerman's Elementary Botany and Spring Flora or equivalent.
5. *Civil Government* — Fiske or Thorpe preferred.
 Or *History* — Myers's *General History.*
6. *Geometry, Plane and Solid* — Venable, White, Wentworth or Wells.
7. *Latin* — Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential), Cæsar, the first three books of the *De Bello Gallico.*

Or *German* — Joynes-Meissner's or Thomas' Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs, and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

For the present, the *German* required for admission may be begun at the University, but without University credits.

8. *Physics* — Carhart and Chute, Gage, Avery, or Appleton.

COURSE IN PHARMACY

NOTE — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Bachelor of Science in Pharmacy

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	5.
Latin (1) Pharmaceutical	5.	Latin (1) Pharmaceutical	5.	Latin (1) Pharmaceutical	5.
or		or		or	
German (1) Elementary.	4.	German (1) Elementary.	4.	German (1) Elementary.	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Spherical Trigonometry, Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Botany (6a) Systematic, Physiological.	5.	Botany (4) Medical.	2.		
Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.	Chemistry (4) Laboratory.	5.
German (2) Science Reading.	2.	German (2) Science Reading.	2.	German (2) Science Reading.	2.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensaries, etc.	5.
Physics (11) Mechanics and Heat.	3.	Physics (11) Electricity & Magnetism.	3.	Physics (11) Sound and Light.	3.
				Metallurgy (2) Mineralogy.	3.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

Pharmacy (9) General Processes.	5.	Pharmacy (10) Prescriptions.	5.	Pharmacy (11) Dispensaries, etc.	5.
Pharmacy (12) Materia Medica.	3.	Pharmacy (13) Materia Medica.	2.	Pharmacy (14) Mat. Medica and Thera.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
General Chemistry (8) Organic.	5.	Physiology (8) Bacteriology.	2.	Physiology (5) Microscopy.	2.
		General Chemistry (9) Organic.	5.	General Chemistry (9) Organic.	5.

FOURTH YEAR

Geology (2) General.	5.	Geology (2) General.	5.	General Chemistry (11) Toxicology.	4.
Pharmacy (15) Assaying.	5.	Pharmacy (17) General.	5.	Pharmacy (17) General.	5.
Thesis.		Thesis.		Thesis.	

Chemistry elective for the year — five hours.
Elective, three hours through the year.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis, embodying the results of special study and research. The subject must be within the field of Pharmacy, and must be announced to the President of the University (dependent upon the written approval of the proper authorities) not later than the beginning of the second term of the fourth year of the Course. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

SHORT COURSE IN PHARMACY

FOR ADMISSION

Candidates for admission who are less than twenty-one years of age must be prepared in the common English branches. Teachers' certificates (in force), or credentials from approved schools, will be accepted in lieu of an examination.

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Botany (1) Elementary.	5.
Latin (1) Pharmaceutical.	5.	Latin (1) Pharmaceutical.	5.	Chemistry (12) Qualitative Analysis.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Latin (1) Pharmaceutical.	5.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensaries, etc.	5.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

Botany (6a) Systematic, Phys.	5.	Botany (4) Medical.	2.	Chemistry (11) Toxicology.	4.
Chemistry (18) Laboratory.	5.	Chemistry (18), (19) Laboratory.	5.	Chemistry (19) Laboratory.	5.
Pharmacy (9) Phar. Chemistry.	5.	Pharmacy (10) Prescription Practice.	5.	Pharmacy (11) Dispensing Practice.	5.
				Physiology (1) Physiology.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (5) Microscopy.	2.
		Physiology (8) Bacteriology.	2.		
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

COLLEGE OF VETERINARY MEDICINE

FOR ADMISSION[1]

The following are the requirements:

I. For applicants for certificates of Veterinary Surgeon: *Arithmetic, Geography* nd *Grammar.*

II. For applicants who intend to become candidates for the degree of Doctor f Veterinary Medicine:

1. *Arithmetic, Grammar, and Descriptive and Physical Geography.*

2. *English Composition and Rhetoric* — Each applicant will be tested as to his ›ility to write clear and correct English. The test will be the writing of two ¡says of about two hundred words each. The first essay will be upon a subject rawn from the candidate's observation or experience; as "A description of my ıtive town," "The most remarkable person I ever met," "My reasons for seeking University education." The second essay will be upon a subject drawn from a ¡t of classics which will be furnished on application.

3. *History* — History of the United States, Johnson preferred.

4. *Latin or German* — One year.

5. *Physics* — Gage, Carhart and Chute, Avery, or Appleton.

6. *Botany* — Kellerman's Elementary Botany and Spring Flora or equivalent.

COURSE IN VETERINARY MEDICINE

NOTE — The figure in parenthesis following the name of each study indicates the number that study in its department. A full description of department work follows this statement Courses.

Degree: Doctor of Veterinary Medicine

FIRST YEAR

FIRST TERM	Credit hours	SECOND TERM	Credit hours	THIRD TERM	Credit hours
Ag. Chemistry (1) Principles.	5.	Ag. Chemistry (5) Organic.	5.	Ag. Chemistry (9) Applications.	5.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Physiology (4) Histology.	5.	Physiology (4) Histology.	5.	Physiology (4) Phys. Chemistry.	5.
Veterinary Medicine (11) Osteology.	5.	Vet. Medicine (12) Myology, etc.	5.	Vet. Medicine (13) Dissections, etc.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Stock Breeding.	4.	Agriculture (10) Stock Feed'g & Hygiene.	4.
Pharmacy (12) Materia Medica.	5.	Pharmacy (13) Materia Medica.	5.	Pharmacy (18) Laboratory.	5.
Vet. Medicine (14) Gen. Pathology.	5.	Vet. Medicine (15) Gen. Pathology.	5.	Vet. Medicine (16) Special Pathology.	5.
Vet. Medicine (19) Clinic.	3.	Vet. Medicine (18) Surgical Diseases.	5.	Vet. Medicine (18) Surgical Diseases.	5.
Vet. Medicine (24) Gen. Surgery.	5.	Vet. Medicine (19) Clinic.	3.	Vet. Medicine (19) Clinic.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

[1] An applicant for admission who may be somewhat in arrears in any given subject, will d opportunity to make up his work in the Columbus High Schools, which are fully accredited the University.

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Vet. Medicine (20) Special Pathology.	3.	Vet. Medicine (21) Special Pathology.	3.	Vet. Medicine (22) Therapeutics.	5.
Vet. Medicine (19) Clinic.	3.	Vet. Medicine (25) Practice in Operating.	3.	Vet. Medicine (19) Clinic.	3.
Vet. Medicine (27) Meat Inspection.	5.	Vet. Medicine (19) Clinic.	3.	Vet. Medicine (26) Horse Shoeing.	5.
Vet. Medicine (18) Surgical Diseases.	5.	Physiology (6) Bacteriology.	3.	Vet. Medicine (33)	2.
Vet. Medicine (31)	3.	Vet. Medicine (23) Obstetrics.	3.	Thesis.	
		Vet. Medicine (32)	3.		
		Thesis.			

THE SUMMER SCHOOL

By action of the Board of Trustees and of the Faculty, a Summer School has been established in the University and placed under the general supervision of the President and Faculty. The immediate supervision of the work of the school is vested in a committee of the Faculty, consisting of the President of the University, a Dean of the Summer School, and the heads of departments which offer courses in the Summer School. The session of the Summer School of 1898 began June 20 and closed July 30, covering a period of six weeks.

COURSES OF INSTRUCTION[1]

In the following list of courses the number of "hours" indicate the number of class exercises each week, whether lectures, recitations or laboratory work.

BOTANY

A. **ELEMENTARY BOTANY**— Single or double Course. Recitations, lectures, and laboratory work. Kellerman's Elementary Botany will be used as a text, and any one of the Manuals. Herbarium of fifty plants required. Those taking the double course will be required to make an additional herbarium illustrating the various classes of plants 5 or 10 hours

B. **ADVANCED BOTANY** — Special work in Systematic Botany, Experimental Physiology, or the Evolution of plants. Lectures and laboratory work. No text-book required. Laboratory fee $1.00 for single, $2.00 for double course..... 5 or 10 hours

[1] The courses for 1899 have not yet been determined. The courses printed herein are given to illustrate the general scope of the school. They cover the work done in 1898.

C. **CYTOLOGY AND SPECIAL METHODS** — Lectures and laboratory work. Karyolimesis and embryology, with special method of imbedding and staining material for original investigation. No text book required. Laboratory fee $1.00 for single, $2.00 for double course 5 or 10 hours

CHEMISTRY

A. **PRINCIPLES OF CHEMISTRY**— Lectures..... 5 hours
B. **QUALITATIVE ANALYSIS**—Laboratory fee $4.00..... 10 hours
C. **QUANTITATIVE ANALYSIS**—Laboratory fee $4.00..... 10 hours

ENGLISH COMPOSITION, LANGUAGE, RHETORIC

A. **TEACHERS' COURSE** — Lectures, conferences, prescribed readings, and reports on the teaching of composition, grammar and rhetoric in the secondary schools. Some of the subjects discussed will be as follows: Class-room method and procedure; the place of the text-book; plans for courses in the secondary schools; plans for lessons; the essay problem; the teacher's necessary equipment; how much grammar; school grammar against historical grammar; the relations between composition and the study of English Classics; the order of topics; the function of criticism; a review of the work of the Committee of Ten and of the English Conferences; a review of recent text-books. "Hinsdale's Teaching the Language Arts" will be used as a starting point for some of the discussions..... 5 hours

B. **PRACTICE COURSE** — Daily compositions, written for the most part in class, to be criticised closely by the instructor, and including the sketch, the criticism, the book review, the short story, the news article, and the brief and argument, with preliminary lecture on each of these types of composition. Text-book. Scott & Denney's Composition-Rhetoric. This course is equivalent to University course No. 51..... 5 hours

C. **ANALYSIS OF PROSE** — A study of specimens of English prose with reference to the principles of Rhetoric which they illustrate. Text-book: Genung's Rhetorical Analysis.

ENGLISH LITERATURE

A. **FOUNDATION STUDIES IN ENGLISH LITERATURE**—A course for teachers consisting of lectures, with illustrative readings. Most of the lectures will deal with the books read and the way in which they should be studied with classes in the secondary schools. A few lectures will be given on the following subjects: The chief aim of the teacher of English Literature; class-room method and procedure; the order in which the prescribed English Classics should be studied; the functions of histories of English Literature and of the English and German critics; plans for courses and lessons; a fair division of the time allotted to English..... 5 hours

B. **TEACHERS' COURSE IN PREPARATORY CLASSICS** — In this course the classics appointed for the examination of 1899 will be studied, beginning with Scott's Ivanhoe. This Course is an enlargement of Course A, and is open only to those who take that course..... 5 hours

C. **TEACHERS' COURSE IN SHAKESPERE** — Beginning with the Merchant of Venice 5 hours

FRENCH

A. **ELEMENTARY COURSE** — Survey of Grammar; rapid reading; drill in pronunciation. The object of this course is to furnish the beginner with the essentials of the language. Text-book: Joyne's Minimum French Grammar and Reader..... 5 hours

B. **TEACHERS' COURSE** — An advanced course for teachers and others possessing a reading knowledge of French. The work will include: (1) special training in pronunciation, conversation, dictation and translation from English into French to secure a practical command of the language; (2) lectures on methods of teaching French, and the teacher's equipment..... 5 hours

GEOLOGY

A. **GENERAL INORGANIC GEOLOGY** — Emphasizing especially Geographical and Lithographical Geology. Students will be encouraged to make and label rock collections. Excursions will be made to surrounding points for study of water action and ice action..... 5 hours

B. **HISTORICAL GEOLOGY**— This course, which is supplementary to Course A, will include lectures and laboratory work, the latter predominating. The lectures will treat of the growth of the North American continent and the development of plant and animal life. The laboratory course will consist of study of typical groups of Ohio fossils... 5 hours

If desired, a short field excursion of two or three days will be made after the close of regular term.

GERMAN

A. **OUTLINE OF GERMAN GRAMMAR** — A comparative study of German and English Grammar, designed especially for teachers, and for more mature beginners who are at home in English Grammar. Reading of Gueber's "Märchen und Erzählungen." Double course..... 10 hours

B. **READING OF GERMAN PEDAGOGICAL WORKS** — This course is based upon the work done in Individual and Scientific Psychology. Some such books as Keber's "Zur Philosophie der Kindersprache," or Lobisch's "Die Seele des Kindes," will be read. For advanced students only 5 hours

C. **GERMAN LITERATURE** — An outline course with supplementary reading; for students with one or more year's preparation..... 5 hours

GREEK

A. **ELEMENTARY COURSE** — For beginners. Text-book: Gleason and Atherton's First Greek Book.

B. **XENOPHON'S ANABASIS** — Books I, II or III. Especially adapted for those who need to complete their preparation for college. Industrious and capable students may possibly arrange for a double course in Xenophon.

Work satisfactorily done may be counted towards admission to the University.

HISTORY

A. **AMERICAN HISTORY** — Political History of the Colonies and of the United States. 1750-1820, Hart's "Formation of the Union" used as a basis. Recitations and lectures. Specially designed for teachers 5 hours

LATIN

A. **CICERO'S ORATIONS** — With special emphasis upon grammatical forms, idiomatic translation, Latin Prose Composition, and Roman History 5 hours

B. **VERGIL'S ÆNEID** — With careful attention to poetic forms, prosody, mythology, Roman life and customs..... 5 hours

If the demand warrants, a second class will be formed to do additional reading in Cicero or Vergil. Work satisfactorily done may be counted towards admission to the University.

MATHEMATICS

A. Courses will be offered in Algebra, Geometry, Trigonometry; also in such higher Mathematics for which there may appear sufficient demand. A special class will be formed for the critical examination of text-books in Mathematics used in the public schools of Ohio.

PHYSICAL TRAINING

A. **TEACHERS' COURSE** — Swedish gymnastics adaptable to public school work 5 hours

B. A course of gymnastics progressing from the light free-hand work to elementary apparatus work. Gymnastic and out-of-door games.... 5 hours

PEDAGOGY

A. **INDIVIDUAL AND GENETIC PSYCHOLOGY**— Lectures, demonstrations and seminaries reviewing the studies of children and of adults with special reference to their relations to educational questions. Laboratory practice in testing the senses, motor ability, etc. A single course 5 hours

PHILOSOPHY AND PSYCHOLOGY

A. **PSYCHOLOGY** — Dr. Scott. Text-book, lectures and discussions. For teachers and those intending to teach. A single course, one hour daily; or a double course, two hours daily..... 5 or 10 hours

A. **PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY**— Mr. Wissler. Lectures and demonstrations supplemented by laboratory practice. A general course aiming at an exposition of psychological, psychophysical and inductive methods of psychological research. A single course, one hour daily; or a double course, two hours daily. Laboratory fees $1.00..... 5 or 10 hours

PHYSICS

A. **DOUBLE COURSE,** in elementary Physics, either through Kinetics and Heat, or through Electricity, Magnetism, Sound and Light..... 10 hours
B. **SINGLE COURSE,** in laboratory practice; along lines depending on ends in view 5 hours
C. **DOUBLE COURSE,** in laboratory, as above..... 10 hours
D. **SPECIAL COURSE,** to make up deficiencies in preparation or record in elementary Physics.

Fees in any single course, $1.00.

ZOOLOGY AND ENTOMOLOGY

VERTEBRATE AND INVERTEBRATE MORPHOLOGY — Classes will be formed to suit applicants — as far as possible.

SUMMER LIBRARY SCHOOL

This school was under the direction of Dr. G. E. Wire, formerly of Columbia College Library, New York, and lately of the Newberry Library, Chicago.

This school gave a fifteen hour course, one hour being devoted to cataloging, one hour to classification and one hour to other forms of library work. This class work was in the morning, leaving the afternoon for individual and practice work.

Under cataloging was considered, not only author and subject cataloging, but also accessioning, shelf-listing, preparation of books for the shelves and preparation of finding lists and special lists. Classification took up largely the decimal classification, but instruction was offered in the expansive classification.

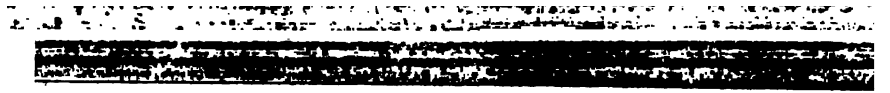
The miscellaneous heads included book selection and buying, book binding and repair, purchase and care of periodicals, care of pamphlets and clippings, public document, stock-taking, arrangement and care of rooms, shelves, fittings and supplies, charging systems, stack and open shelves, rules and regulations, reference and reading room work, children's rooms, school work, library legislation, traveling libraries, library associations and periodicals.

To make the course of benefit to as many people as possible, those who intended taking the course specified what they particularly wanted. These preferences were considered, as it is the wish to benefit directly the largest number possible. Aside from the technical work, arrangements were made whereby all interested in library work received advice and instruction in their own peculiar problems. This was planned particularly for library trustees and officers of Women's Clubs, and others who were desirous of some help along their own lines of work.

A portion of each day was devoted to personal work. The Director had a separate hour for his work. In many cases the problems were of so peculiar and so personal a nature as not to admit of class treatment. The director was accessible including lectures at least eight hours a day.

Fees were $15 for the full course. Special rates for part of the course. Cataloging supplies, such as slips, accession and shelf list sheets were furnished.

THE DEPARTMENTS



The Departments

1900-1901

The subjects set forth under each Department limit and define the administrative authority and responsibility of the head of that Department.

AGRICULTURE

[Townshend Hall]

Professor Hunt, Associate Professor Gibbs, Assistant Professor Noyes, Mr. Herrick, Mr. Ruhlen

BREEDS OF LIVE STOCK. Lectures and recitations three times a week upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum once a week in scoring and judging live stock. First term.

PRINCIPLES OF BREEDING. Lectures and recitations three times a week upon the laws of heredity and their practical applications. Practicum once a week in scoring and judging live stock, and in writing and tracing pedigrees. Second term.

STOCK FEEDING AND HYGIENE. Lectures and recitations three times a week upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quality of food to produce given effects. Practicum once a week in calculating digestibilities, nutritive ratios and feeding standards. Third term.

FARM EQUIPMENT. Lectures and recitations three times a week upon selecting, planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum once a week in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. First term.

SOILS. Lectures and recitations three times a week upon the origin, formation, kinds, and physical properties of soils, and their improvement by cultivation, fertilization, drainage, and irrigation. Practicum once a week in laboratory testing physical properties of several soils, determining the relation of soils to heat, moisture, air, and fertilizers, and making mechanical analysis. Second term.

FARM CROPS. Lectures and recitations three times a week upon the history, production, marketing, cultivation, and harvesting of farm crops. Practicum once a week with growing and dried specimens of farm crops, including grasses, clovers, and other forage crops. Third term.

[1] These numbers are "finding numbers," and do not necessarily indicate the sequence of pics.

14. **ANIMAL MECHANICS AND EXTERIOR.** Lectures and recitations three times a week upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum once a week in measuring animals and testing the value of given measurements for given purposes. First term.
15. **BUTTER MAKING AND CHEESE MAKING.** Recitations twice a week. Laboratory practice two half days each week in running separators, churning and working butter, making cheese, and testing and pasteurizing milk. Second term.
16. **HISTORY OF AGRICULTURE AND RURAL ECONOMICS.** Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems. Four times a week. Third term.
5. **DAIRY FARMING.** Lectures once a week upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms. Practicum once a week in scoring and judging live stock, writing pedigrees, and calculating feeding standards. Second term.
6. **BUTTER MAKING AND CHEESE MAKING.** Practice in running separators, churning and working butter, etc., making cheese and testing and pasteurizing milk. Four half days each week. Second term.
7. **BUTTER MAKING AND CHEESE MAKING.** Lectures and recitations. Two hours each week. Second term.

AGRICULTURAL CHEMISTRY

[TOWNSHEND HALL, Rooms 29, 35, 34 and 30]

Professor Weber, Mr. Vinson

1. **PRINCIPLES OF CHEMISTRY AND CHEMICAL NOMENCLATURE.** Lectures and textbook for three or four weeks, five times a week; then lectures twice a week on Chemistry of Non-metals, and laboratory practice three times a week. First term.
8. **ORGANIC CHEMISTRY.** Lectures twice a week; laboratory practice three times a week. Second term.
9. **APPLICATION OF CHEMISTRY TO AGRICULTURE.** Lectures twice a week; laboratory three times a week. Third term.
4. **LABORATORY.** Analysis of fertilizers, feed-stuffs, dairy products, fruits, vegetables, alcoholic liquors, etc. Five laboratory periods a week through the year.
7. **CHEMISTRY OF MILK AND MILK TESTING.** Twice a week. Dairy Course.
6. **LABORATORY.** Five times a week through the year.

AMERICAN HISTORY AND POLITICAL SCIENCE

(*See* History.)

ANATOMY AND PHYSIOLOGY

[BIOLOGICAL HALL, Rooms 12 and 20]

Professor Bleile, Assistant Professor Morrey, Mr. Dresbach

COLLEGES OF AGRICULTURE, PHARMACY, AND VETERINARY MEDICINE

1. **HUMAN ANATOMY AND PHYSIOLOGY.** Lectures, recitations and laboratory work three times a week. First, second and third terms. This course must be preceded by, or accompanied with, a course of chemistry.

2. **GENERAL PHYSIOLOGY.** Lectures, recitations and demonstrations. Three times a week. Third term. [Short Course in Agriculture.]
3. **CHEMICAL PHYSIOLOGY.** Five times a week. Third term. [Domestic Economy Course.]
4. **HISTOLOGY AND HISTO-CHEMISTRY.** Five times a week through the year. This course must be preceded by, or accompanied with, a course in chemistry.
5. **MICROSCOPY AND URINARY ANALYSIS.** Lectures and laboratory work. Twice a week. Third term.
6. **BACTERIA,** in their relation to Milk, Butter and Cheese. Lectures and laboratory work. Twice a week. Second term.
7. **BACTERIOLOGY.** Three times a week. Second term. [Veterinary Medicine.]
8. **BACTERIOLOGY.** One lecture, one laboratory period, a week. Second term. [Pharmacy.]
9. **PHYSIOLOGICAL LABORATORY.** Three times a week. [May include work in bacteriology.]

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51[1]. **HUMAN ANATOMY AND PHYSIOLOGY.** Lectures, recitations and laboratory work. Three times a week.
53. **PHYSIOLOGICAL LABORATORY.** Three laboratory periods a week.
55. **PHYSIOLOGICAL LABORATORY.** Five laboratory periods a week.
57. **BACTERIOLOGY.** One lecture, one laboratory period a week.
59. **HISTOLOGY AND HISTO-CHEMISTRY.** Laboratory. Five laboratory periods a week.
61. **BACTERIOLOGY.** One lecture, two laboratory periods a week.

Second Semester

52. Continuation of Course 51. Three times a week.
54. Continuation of Course 53. Three laboratory periods a week.
56. Continuation of Course 55. Five laboratory periods a week.
58. **MICROSCOPY.** Lectures and laboratory work. Twice a week. Last half of semester.
60. Continuation of Course 59. Five laboratory periods a week.

ANCIENT ART

(*See* Greek Language and Literature.)

ARCHITECTURE

(*See* Drawing.)

[1] "Finding numbers" from 51 upwards always indicate Semester work.

ASTRONOMY

[EMERSON MCMILLIN OBSERVATORY]

Associate Professor H. C. Lord, Mr. Maag

COLLEGE OF ENGINEERING

2. **ASTRONOMY AND GEODOSY.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Four times a week. Third and first terms.
3. **METEOROLOGY.** Twice a week. Third term. [Agriculture and Horticulture.]

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

52. **GENERAL ASTRONOMY.** Lectures and recitations. Five times a week. Second half, second semester.
54. **MATHEMATICAL ASTRONOMY.** Five times a week. Second semester. Consult Professor Lord.
55, 56, **THEORETICAL ASTRONOMY.** Lectures and Observatory practice. The theory of the undisturbed motion of a planet or comet and the calculation of ephemerides. Parabolic orbits from three complete observations. Orbits from three complete observations, including the eccentricity. Work in the Observatory with the twelve-inch equatorial. Definite orbits. Observatory work continued. Authorities: Watson, Klinkerfeus, Appolzer and the astronomical journals. Five times a week through the year.
57, 58. **ASTRO-PHYSICS.** Lectures on the theory of the Spectroscope and its use in Astronomy, supplemented by practice with the large spectroscope of the Observatory. Five times a week through the year.
Astronomy 55, 56, 57 and 58 are open only to students who have had Calculus.
60. **METEOROLOGY.** Twice a week. Second half, second semester.

BOTANY

[BOTANICAL HALL]

Professor Kellerman, Mr. Schaffner, Mr. Collett

COLLEGES OF AGRICULTURE, PHARMACY, AND VETERINARY MEDICINE

1. **ELEMENTARY BOTANY.** Lectures, recitations and field work. Text-book: Kellerman's *Elementary Botany* and *Spring Flora*. Must precede all other courses in this department except course 9. Five times a week. Third term.
4. **MEDICAL BOTANY.** Twice a week, second term. Similar to course 56 in the College of Arts, Philosophy and Science. Reference book: Maisch's *Organic Materia Medica.*
6. **PHYSIOLOGICAL BOTANY.** Lectures, recitations, and laboratory work. Barnes' *Plant Life.* Five times a week. First term.
6*a*. **SYSTEMATIC AND PHYSIOLOGICAL BOTANY.** Lectures, recitations and laboratory work. Barnes' *Plant Life.* Five times a week. First term.
7. **PHYSIOLOGICAL AND ECONOMIC BOTANY.** Lectures, recitations and laboratory work. Barnes' *Plant Life.* Five times a week. Second term.

8. **VEGETABLE PATHOLOGY.** Lectures, recitations and laboratory work. Five times a week. Third term.
9. **DENDROLOGY.** Lectures, field and laboratory work. Twice a week, first term. Open to students who have not studied Botany.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. Similar to Course 1 in College of Agriculture.
53. Similar to Course 6*a* in College of Agriculture. Four times a week.
55. **SYSTEMATIC AND PHYSIOLOGICAL BOTANY.** Lectures, recitations, laboratory and field work. Barnes' *Plant Life.* Four times a week.
57. **LABORATORY WORK.** Fungi, Algae, Bryophyta. Two or three times a week.
59. **ADVANCED LABORATORY WORK IN HISTOLOGY AND PHYSIOLOGY.** Five times a week. Open to students who have taken Course 53 or 55.
61. **SYSTEMATIC BOTANY. PHENOGAMIC AND CRYPTOGAMIC.** Three to five times a week. Open to students who have taken Course 53 or 55.
63. **MONOGRAPHIC WORK.** Graduate Course. Credit five or ten hours.
65. **RESEARCH WORK IN MORPHOLOGY AND PHYSIOLOGY.** Graduate Course. Credit five or ten hours.

Second Semester

56. **MEDICAL BOTANY.** Laboratory work. Maisch's *Organic Materia Medica.* Twice a week. First half of semester. This course must be preceded by Course 53.
58. Continuation of Course 57. Pteridophyta, Gymnospermae, Angiospermae. Two or three times a week.
60. Continuation of Course 59. Five times a week.
62. Continuation of Course 61. Three to five times a week.
64. Continuation of Course 63. Credit five or ten hours.
66. Continuation of Course 65. Credit five or ten hours.

CHEMISTRY

[CHEMICAL HALL, Rooms 24, 25, 14, 21, 22, 7 and 18]

Professor McPherson, Professor Norton, Assistant Professor Henderson, Mr. Kohr, Mr. Gore

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ELEMENTARY CHEMISTRY.** Arranged for students who have little or no knowledge of Chemistry. Three sub-divisions; one lecture, one quiz, and three hours' laboratory practice weekly. In the laboratory the student performs an extended series of experiments illustrating the principles of Chemistry. Three hours credit.
53. **QUALITATIVE ANALYSIS.** Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to analysis of unknown substances. Three to five times a week. This course must be preceded by Courses 51 and 52.

55. **QUANTITATIVE ANALYSIS.** Laboratory, lectures and recitations. Use of the balance and general principles of gravimetric analysis. Drill in the solution problems in quantitative analysis; study of properties of precipitates; principles of volumetric analysis. Selections are made from such analytical methods as best meet the needs of the student. The samples used for analysis are mixtures or commercial products the percentage composition of which is not made known to the student until he has reported his own results. Five times a week.

57. **ORGANIC CHEMISTRY.** Laboratory, lectures and recitations. Open only to students who are familiar with at least the principles of quantitative analysis. Five times a week.

59. **ADVANCED CHEMISTRY.** Laboratory. Arranged for special students who have had courses 53, 54, 55, 56, 57; also course 58 for students in Organic Chemistry. Students are allowed to select such work as they are capable of undertaking — as, the critical examination of analytical methods as well as the study of new methods. Five times a week.

61*a*. **INORGANIC PREPARATION.** Laboratory. This course includes the preparation of inorganic substances from the crude materials. Special attention is given to the preparation of chemically pure compounds, to be used in certain quantitative processes. Thorpe's text-book on Inorganic Preparations is used, and reference is made to Bender and Erdmans' *Anorganische Preparate* and Krauche's *Prufung Chemischer Reagientien.* This course must be preceded by quantitative analysis. Four times a week until the Christmas Recess.

Students electing this course must follow with theoretical chemistry and sanitary analysis.

61*b*. **PHYSICAL CHEMISTRY.** Lectures and recitations. A course of twelve weeks beginning after the Christmas Recess. Four times a week.

63. **CHEMICAL SEMINARY.** Special students will meet to discuss special topics and reviews of current literature. Once a week.

65. **ELECTROLYTIC ANALYSIS.** Laboratory. Extended practice is given in quantitative electrolytic analysis. Twice a week.

Second Semester

52. Continuation of Course 51. Three hours' credit.

54. Continuation of Course 53, including use of Spectroscope.

56. **QUANTITATIVE ANALYSIS.** Continuation of Course 55. Five times a week.

58. **ORGANIC CHEMISTRY.** Laboratory. Continuation of Course 57. Arranged for students who wish to specialize in organic chemistry. The course includes further preparation of typical organic compounds and organic combustions. Five times a week.

60. Continuation of Course 59.

64. Continuation of Course 63.

66. Repetition of Course 55.

68. **SANITARY ANALYSIS.** Laboratory and Lectures. A study of the most important chemical methods for the analysis of water and air. This course must be preceded by quantitative analysis, and at least the equivalent of Course 61 in Anatomy and Physiology (bacteriology). The course extends over the last ten weeks of the second semester.

Students who can elect but one year of Analytical Chemistry, will take Courses 53 and 66. Others will take 53 and 54, then follow with 55, 56 and 57.

7. **ELEMENTARY CHEMISTRY.** Inorganic, Lecture, Laboratory and Quiz. Laboratory work; First Term, experiments upon the non-metals; Second Term, principles of qualitative analysis. Five times a week. First and Second Terms. (All four-year Engineering Courses, and long and short Courses, Ceramics, Mine Engineering and Pharmacy.)
12. **QUALITATIVE ANALYSIS.** Five times a week. Third term.
13. **QUALITATIVE ANALYSIS.** Three laboratory periods a week. Second term. (Short Course in Mining.)
4. Similar to Courses 55 and 56. Five times a week through the year.
8. **ORGANIC CHEMISTRY.** Lectures. Five times a week. First term.
9. **ORGANIC CHEMISTRY.** Laboratory. Similar to Course 58. Five times a week. Second and third terms.
11. **TOXICOLOGY.** Lectures. Poisons — their effects, antidotes and detection. Four times a week. Third term.
14. **THEORETICAL CHEMISTRY.** Lectures and Recitations. Three times a week. Second term.
15. **SANITARY ANALYSIS.** Similar to Course 68. Four times a week. Third term.
16. **APPLIED CHEMISTRY.** Lectures on Industrial Chemistry. These are made as practical as possible by visits to different chemical works. When possible specialists dèliver lectures on subjects belonging to their particular line of work. Three times a week. Second term.
17. **INORGANIC PREPARATIONS.** Similar to Course 61. Four times a week. First term.
18. Similar to Course 57.
19. Similar to Course 66.

For Courses in the technical analysis of iron, steel and allied products, see the Department of Mining and Metallurgy.

For Courses dealing with the application of Chemistry to Agriculture, see the Department of Agricultural Chemistry.

CIVIL ENGINEERING

[HAYES HALL, Rooms 14 and 19]

Professor Brown, Assistant Professor Sherman

1. **LAND SURVEYING.** Recitations and field work. Johnson's Theory and Practice of Surveying. Six times a week. First term. Second year.
2. **RAILROAD SURVEYING.** Recitations and field work. Searle's Field Engineering. Six times a week. Third term. Second year.
3. **TOPOGRAPHICAL SURVEYING.** Lectures, field work and drawing. Johnson's Surveying used for reference. Four times a week. First term. Third year.
4. **TOPOGRAPHY.** Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four times a week. Second term. Second year.
5. **WORKING DRAWINGS IN RAILWAY CONSTRUCTION.** Lectures and drawing and estimates of simple structures. Three times a week. Second term. Third year.
6. **STEREOTOMY.** Recitations, drawing and model cutting. Warner's Stereotomy. Four times a week. Second term. Third year.

7. **BRIDGE STRAINS.** Recitations and lectures. Part I of Dubois's Strains in Framed Structures. Five times a week. Third term. Third year.
8. **BRIDGE DESIGNING.** Lectures and drawing. Part II of Dubois's Strains in Framed Structures and Johnson's Modern Framed Structures used for reference. Five times a week. First term. Fourth year.
10. **SANITARY ENGINEERING.** Lectures. Five times a week. Third term. Fourth year.
14. **CIVIL ENGINEERING LABORATORY.** Cement testing, adjustment of instruments. Twice a week. Second term. Fourth year.
15. **MASONRY CONSTRUCTION.** Recitations and lectures. Baker's Masonry Construction. Five times a week. First term. Fourth year.
16. **HIGHWAYS.** Lectures on roads, streets, canals, railroads and rivers. Five times a week. Second term.
 Fourth year students in Civil Engineering must elect either 16 or 17.
17. **RAILWAY LOCATION.** Recitations and lectures. Wellington's Economic Theory of Railway Location. Five times a week. Second term.
 Fourth year students must elect either 16 or 17.
18. **WATER SUPPLY.** Recitations and lectures. Fanning's Water Supply. Five times a week. Third term. Fourth year.
19. **TRUSSES.** Lectures and drawing. Five times a week. Third term.
 Third year, Mine Engineering and Mechanical Engineering.
20. **ROOF TRUSSES.** Lectures and drawing. Five times a week. First term.
 Third year, Architecture.
21. **SURVEYING.** Recitations and field work. Davies' Surveying. Three times a week. Third term.
 Third year, Architecture.
22. Summer Course in Surveying. Following the Second Year. This Course begins on Thursday after Commencement and runs for four weeks of six days per week. The class will be taken in camp and will devote all their time to the practice of land and elementary railroad surveying, and to the computations, drawings and reports necessary to such work.
 The Course is open to students who have credit for Courses 1 and 2. Students having conditions in Courses 1 or 2 may take the Course with the permission of the head of the department.
23. Summer Course in Surveying. Following the Third Year. This Course begins on Thursday after Commencement and runs for four weeks of six days per week. The class will be taken in camp and will devote all their time to the study and practice of advanced railroad surveying and to the various kinds of topographical surveying and to the making of computations, drawings and reports necessary to such work. This Course is a continuation of Course 22 and must be preceded by Courses 3 and 22.
 The Course is open to students who have credit for Courses 3 and 22. Students having conditions in Courses 3 or 22 may take Course 23 with the permission of the head of the department.

CLAY WORKING AND CERAMICS

[ORTON HALL, Rooms 18, 27, 26 and 25]

Professor Edward Orton, Jr., Mr. Bleininger

1. **QUANTITATIVE ANALYSIS OF SIMPLE MINERALS.** This course is open only to those who have completed General Chemistry. The student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy minerals. Five times a week. First term.

2. Continuation of Course 1. The student begins the quantitative analysis of clays and complex minerals, working first on samples of known composition, and later on unknown materials. Five times a week. Second term.

3. Continuation of Course 2. The student completes the ultimate analysis of clays, and begins the proximate or "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five times a week. Third term.

4. **A SERIES OF LECTURES** (supplemented by frequent recitations) on the origin, composition and properties of clays and other minerals employed in the clay, glass, and cement industries. Five times a week. First term. Laboratory work in the physical testing of clays, and in their mechanical analysis.

5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of bricks and the coarser clay wares, including the selection and winning of the materials, their preparation, manufacture, burning and testing. Five times a week. Second term.

6. Continuation of Course 5. A series of lectures, with recitations on the classification and manufacture of pottery and the finer grades of clay wares, including the selection of materials, preparation of the bodies, manufacture of the ware, preparation of the glazes, burning and decoration of the wares, and the pyrometry of ceramics. Five times a week. Third term.

7. Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five times a week. Second term.

8. Continuation of Course 7. The further analysis of colored glasses and glazes, enamels, and ceramic colors, especial attention being given to the determination of the coloring and opacifying oxides. Five times a week. Third term.

9. **LABORATORY WORK IN CERAMICS.** Open only to those who have completed Courses 3 and 6. The student will first undertake the production of such wares as are made from single clays, such as bricks for building and paving purposes; then those wares whose bodies are made by blending two or more natural clays, such as firebrick and refractory materials, earthenwares, stonewares, and yellow wares; and lastly, such wares as are made by the building up of an artificial body, such as is used in the production of white wares, porcelain, and in glazed and encaustic tiles. In each case the bodies made will be made into appropriate wares, burnt, and tested as to quality. Five times a week. First term.

10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes," and taking successively the soft raw-lead glazes, the fritted lead-boracic-acid glazes, and the hard-fire leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit" it accurately. Five times a week. Second term.

11. Continuation of Course 10. The student will practice on the use of the coloring and opacifying oxides on glazes, and on the production of vitrifiable colors for the underglaze and overglaze decoration of pottery, and in the production of body-stains for encaustic wares. Five times a week. Third term.

12. A series of lectures on the manufacturing and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Facilities for laboratory work in making, burning, and testing cements will be given. Five times a week. Second term.

13. Practice in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns, and burning cylinders. Students will be allowed to specialize along the lines they intend to follow. Twice a week. Second term.

14. **MINERAL REPORTS.** A series of lectures and recitations, with frequent quizzes on the prospecting and opening up of mineral properties, and in the inspection of factories and ceramic plants, with a view to recommending economic changes in them. Frequent trips will be made to the important clay-working centers of Ohio for field-work and practice in observation. Students will be allowed to specialize along their intended lines. Five times a week. Third term.

15. **THESIS.** A satisfactory thesis, involving original investigation and special study must be completed as a requisite for graduation. The subjects for these must lie inside the range of ceramic work, but can be made to follow the line along which the student has been specializing.

DOMESTIC ECONOMY

[HAYES HALL, Rooms 1, 3 and 10]

Associate Professor Bowman, Assistant Professor Souther

DOMESTIC SCIENCE

1. **FOOD ECONOMICS.** The evolution of society as affected by food conditions, the study and classification of food principles. The preparation and serving of typical foods of various classes.

 One lecture and three laboratory periods a week. Four hours credit. First term.

2. **CONTINUATION OF COURSE I.** Comparative nutritive and money values of foods. Preparation of weekly dietaries for an average family. (Cost limited by instructor. U. S. Bulletin standards used). Preparation and serving of typical foods of various classes.

 One lecture and three laboratory periods a week. Four hours credit. Second term.

3. **EMERGENCY WORK AND HOME NURSING.** Study of dietetic treatment for various diseases. Invalid cookery.

 One lecture and three laboratory periods a week. Four hours credit. Third term.

4. **PRESERVATION OF FOODS.** Four weeks.
 Hygienic Care of Clothing. Laundry Work (Demonstration). Eight weeks.
 One lecture and three laboratory periods a week. Four hours credit. First term.

10. **HOUSEHOLD ECONOMICS.** The ordering of Housework. Keeping of household accounts. Home sanitation and hygiene considered.

 One lecture (illustrated if necessary) a week. One hour credit. Third term.

DOMESTIC ART

5. **PRIMITIVE AND ANCIENT INDUSTRIAL LIFE.** Its effect upon the artistic and industrial evolution of society.
Sewing Methods considered. Preparation by hand of a series of models.
One lecture and three laboratory periods a week. Four hours credit. Second term.

6. **TEXTILES.** Study of fibres, and their growth. The process of manufacture. The effect upon industrial activity. Draughting and cutting of wash fabrics. Machine work on same.
One lecture and three laboratory periods a week. Four hours credit. Third term.

2. **HYGIENIC AND ARTISTIC DRESS.** Consideration of line, form and color. Choice and treatment of textiles.
Principles of dress making and millinery. Designing.
One lecture and three laboratory periods a week. Four hours credit. First term.

8. **ART APPLIED TO DRESS AND HOME DECORATION.** Millinery, dressmaking and art needlework.
One lecture and three laboratory periods a week. Four hours credit. Second term.

9. **HISTORY OF DOMESTIC ART AND ARCHITECTURE.** Woman's tailoring.. House Decoration.
One lecture and three laboratory periods a week. Four hours credit. Third term.

11, 12, 13. The same work as under 5, 6; except that it is expanded and made continuous through the entire year, as an elective to young women carrying other courses in this or other Colleges of this University. Credits are three hours first term. University credits are three hours first term, three hours second term, two hours third term.

DRAWING

[HAYES HALL, Rooms 22, 24 and 37]

Associate Professor Bradford, Assistant Professor French, Mr. Lewis

1. **FREEHAND DRAWING.** Practice and occasional lectures. Pencil, charcoal, pen and water-color drawing from copies, models and plaster casts.
One drawing period a week, three terms, Industrial Arts.
Two drawing periods a week, first term, Short Mining and Domestic Economy.
Two drawing periods a week, first and second terms; all four-year Engineering Courses.
Three drawing periods a week, three terms, Architecture.

2. **LETTERING.** Practice and occasional lectures.
Two drawing periods a week, third term, Industrial Arts, and Short Mining.
Three drawing periods a week, third term, Ceramics, Civil, Electrical, Mechanical and Mine Engineering, and Architecture.
This Course must be preceded by Course 1.

3. **MECHANICAL DRAWING.** Lectures or recitations, one period a week. Practice two periods a week. All Engineering, Industrial Arts, Architecture. Subjects: Orthographic, Isometric and Oblique Projection and elementary Working Drawings. First term.

Lectures or recitations two periods a week. Practice one period a week, in Industrial Arts and in all Engineering Courses except Civil Engineering; three periods a week in Civil Engineering and Architecture. Subject: Descriptive Geometry. Second term.

Lectures or recitations, one period a week. Practice, two periods a week in Engineering Courses; four periods a week in Architecture. Subject: Shades, Shadows and Perspective. Third term, in all four-year Engineering and Industrial Arts Courses and the Course in Architecture. First term in the Short Mining and Domestic Science Courses.

This Course must be preceded by Course 2.

4. **DRAUGHTING AND BLUE-PRINTING.** Practice and occasional Lectures. Three periods a week, second term. Arranged especially for the students in the Short Mining Course. This Course must be preceded by the first term of Course (3).

5. **TECHNICAL DRAWING.** Lectures and Practice. Rules and methods for working drawings, tracing, blue-printing, machine design and practice in making same to represent form and dimensions for shop use. Three periods a week. First term, Mechanical and Electrical Engineering Courses. This Course must be preceded by Courses (2) and (3).

7. **PHOTOGRAPHY.** Lectures and Practice. Lectures: Optics of Photography, chemistry of photography, exposing and developing, printing, lantern slides, orthochromatic photography and some of the applications of photography. Practice in outdoor, interior, instantaneous and flash-light photography, copying, lantern slides, and printing. Two periods a week. Ceramics, Architecture, first term. Civil, Mechanical and Mine Engineering, third term. The first term of this Course is elective.

8. **MECHANICAL DRAWING.** Lectures and Practice. Geometric and Projection Drawing. Two periods a week, first and second terms, Industrial Arts.

10. **MECHANICAL DRAWING.** Lectures and Practice. Arranged especially for the students in Agriculture and Horticulture. Two periods a week, first term.

11. **MECHANICAL DRAWING.** Lectures and Practice. Arranged especially for the students in Short Course in Ceramics, five periods a week, third term.

12. **CLAY MODELING.** Modeling in Clay and Casting in Plaster, ornamental forms from designs, photographs, nature and original designs. Two periods a week; first, second and third terms.

This Course must be preceded by Course (1).

Domestic Economy Course, second term. Architectural Course, second and third terms. This Course must be preceded by Course (1).

13. **TECHNICAL AND DECORATIVE DESIGN.** Lectures and Practice. Lectures on the principles of decorative design in monochrome, color and relief, and practice in the same. Two periods a week; first, second and third terms.

14. **PEN DRAWING.** Two periods a week, first term. Arranged especially for the Course in Architecture. This Course must be preceded by Course (1).

15. **TECHNICAL DRAWING.** Lectures and practice. House Designing. Five periods a week, third term. Domestic Economy.

16. **LECTURES AND PRACTICE.** Technical Drawing consisting of the designing and preparation of specifications of structures related to agriculture. Three periods a week, third term.

ART

An elective course in Art offered by Department of Drawing especially for the students of the Domestic Economy Course, but may be taken by any other students of the University.

Must be preceded by Course 1 in Drawing or its equivalent elsewhere.

17. **LECTURES AND PRACTICE.** Lectures on color standards, color theory, color harmony, color appearances, tone and gradation, atmosphere and values. Practice in color work either water or oil color. First term. Lectures illustrated by lantern slides.

18. **LECTURES AND PRACTICE.** Lectures on objects of art, ideas and subjects, style and individuality, schools of art, great artists including old and modern masters. Illustrated by lantern slides. Practice in water or oil painting from still life. Second term.

19. **LECTURES AND PRACTICE.** Lectures will be a continuation of second term's work and including sculpture and the master sculptors. Illustrated by lantern slides. Practice in water or oil painting from life and nature or clay modeling. Third term.

The above is to be offered as an elective for two or three hours as follows: Lecture for one hour and practice for two or four hours as the student has time.

ARCHITECTURE

1. **ORDERS OF ARCHITECTURE.** Detail drawing of the Orders, to accompany the study of Ancient Art. One lecture, and four practice periods a week, second term.

2. **STYLES OF ARCHITECTURE.** Lectures and drawing of Architectural Details representing the characteristic styles in Architecture. One lecture, and four practice periods a week, third term.

3. **DESIGNING.** Lectures and Designing of Architectural structures adapted to modern requirements. Five periods a week; first, second and third terms.

4. **SPECIFICATIONS.** Lectures and Practice in preparing specifications for Architectural Structures. Two periods a week, first term.

5. **DECORATION AND ORNAMENT.** Lectures. The practice part of this Course will be incorporated in Courses (3) and (8). Three periods a week, second term.

6. **ESTIMATES.** Lectures and Practice in preparing estimates for structure designed in Courses (3) and (8). Four periods a week, third term. The duties of a superintendent will be considered in this Course.

7. **HEATING AND VENTILATING AND PLUMBING.** Lectures. The practical applications of this Course will be incorporated in Courses (3) and (8). Five periods a week, second term.

8. **DESIGNING.** Lectures and Practice. Designing of buildings requiring steel and fire-proof construction. Five periods a week, third term.

ECONOMICS AND SOCIOLOGY

[UNIVERSITY HALL, Rooms 17 and 18]

Associate Professor Clark

Course 51 or Course 52 must precede all other Courses.

First Semester

51. **ELEMENTS OF POLITICAL ECONOMY.** A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Text-book, lectures and individual investigations. Four times a week. This Course is repeated in the Second Semester (as Course 52). Students who are required to take the subject, those whose names begin with the letters L to Z will take it in the First Semester; others will take it in the Second Semester (as Course 52).

53. **THE HISTORY OF INDUSTRIAL SOCIETY.** A general view of the evolution of industrial society; and a study of causes and effects of past economic policies together with their bearing on existing conditions; with special reference to England and America. Lectures and assigned readings. Twice a week.

55. **PRACTICAL PROBLEMS IN ECONOMICS.** A rapid study of immigration, money, railroads, crises and tariff. Lectures and collateral readings. Twice a week.

57. **THE TRANSPORTATION PROBLEM.** A study of the development and present economic status of roads, canals and railroads in their relation to industry and to the state. Lectures. Twice a week.
Not offered in 1899-00.

59. **PUBLIC FINANCE AND TAXATION.** This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Municipal indebtedness and corporate financiering are incidentally treated. Text-book and lectures. Twice a week.
Not offered in 1899-00.

61. **SEMINARY IN ECONOMICS.** Two hours a week at one meeting. All students who elect their Major Study in Economics must take this course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

63. **SOCIOLOGY AND STATISTICS.** Lectures and laboratory work. One hour credit. This course may accompany courses 55, 57, 59 or 65.

65. **COMMERCIAL GEOGRAPHY.** A scientific study of business relations and conditions, domestic and foreign; the sources, quantity and quality of products, and the distribution of the same; trade routes and the means of communication. The Consular Reports will constitute one basis of study. Texts and lectures.

Second Semester

52. **ELEMENTS OF POLITICAL ECONOMY.** Text-book, lectures and individual investigations. Four times a week. (This is a repetition of Course 51, and will be taken in the Second Semester by those students (of whom it is required) whose names begin with the letters from A to K.)

53. **THE HISTORY AND THEORY OF SOCIALISM.** Lectures and collateral readings. Twice a week.

56. **INDUSTRIAL AND SOCIAL REFORMS.** A study of labor problems, charities and corrections, monopolies, insurance, trusts, etc. Lectures and collateral readings. Twice a week.

58. **MONEY, CREDIT AND BANKING.** This course involves the history and theory of the subject; a comparative study of monetary systems, currency, etc.; together with various methods of banking; national banks, clearing houses, sub-treasury, etc.; and a critical analysis of proposals for reform. Texts, lectures and collateral reading. Twice a week.
Not offered in 1899-00.

60. **INDUSTRIAL AND FINANCIAL HISTORY OF THE UNITED STATES.** A complete survey of American industries, financial resources and policies; public lands, government subsidies, internal revenue, etc.; history and description of the Treasury and Interior Departments, the Mints, etc. Lectures and collateral readings. Twice a week.

62. **SEMINARY IN ECONOMICS.** Two hours a week at one meeting. This is a continuation of Course 61, and is open only to those who have had that course. All students who elect their Major Study in Economics must take this Course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

64. **SOCIOLOGY AND STATISTICS.** A continuation of Course 63. One hour credit. May be taken separately or accompany Courses 56, 58, 60 or 66.

Courses 1 and 2 in the College of Agriculture and Domestic Science are the same as Courses 51 and 52 described above.

66. **COMMERCE AND TRADE.** Theory and practice of business. Standard business forms, commercial paper, stocks and bonds, insurance policies and investment securities of all kinds will be studied with the aid of sample copies. This is an advanced course and should be preceded by four elective courses in the department including Course 60. Required readings and reports on current commercial and financial literature. Lectures.

EDUCATION

[UNIVERSITY HALL, Rooms 51 and 54]

Professor Gordy, Mr. Wissler

First Semester

51. **ELEMENTARY EDUCATIONAL PSYCHOLOGY.** This course is intended to be helpful to three classes of students: (1) Those who are not preparing to teach, but who wish to make some study of education in order that they may perform their duties as members of society more intelligently; (2) Those intending to teach and who wish to study the relations between Psychology and education; and (3) Those preparing to be superintendents and who wish to get suggestions as to the best method of teaching Psychology to teachers. The text used is Gordy's *Psychology*. Students will be required to do collateral reading and bring in reports of their work. Four hours a week.

53. **HISTORY OF GREEK EDUCATION.** Students of this course will make a study of the history of the education of the Greeks from the time when life was their only school to the time when Greece became the teacher of the world. The connection between Greek life and Greek education will be sharply emphasized; the defects of Greek ideals of life will be shown as reappearing in Greek ideals and methods of education, and these in turn as exerting an influence on Greek life. This course will be essentially a study of Greek civilization, but with the practical purpose of getting light for the solution of our own problems. It is believed that the courses will be especially helpful to those preparing to teach history, and the classics. The texts used are Davidson's *Greek Education*, and Davidson's *Aristotle*. Readings are required of students in Greek history and Plato's *Dialogues*. Four hours a week.

55. **THE HERBARTIAN PEDAGOGY.** The object of this course is three-fold: (1) To ascertain what the Herbartian Pedagogy is; (2) To determine its truth, and (3) To consider carefully its applicability — so far as it is true — to the schools of this country. Special attention will be given to these Herbartian theories that are most widely current in this country. The texts used are Herbart's *Science of Education*, De Garmo's *Herbart* and Lange's *Apperception*. Four hours a week.

59. **CHILD STUDY.** An elementary course in the growth and development of children, giving special attention to the pedagogical aspect of the subject. Though arranged primarily for teachers this course treats of subjects of universal interest such as the child as a social factor, function of play, the child and self-government, the child and the race, etc. Open to all students. Twice a week.

67. **EDUCATIONAL VALUES.** This course seeks to determine the capacity of the various subjects pursued in elementary and secondary courses to contribute to true educational ideas. The work is based on Fouillie's *Education from a National Standpoint*. Twice a week.

69. A study of Scientific Method; intended especially for those preparing to teach Science. Twice a week.

71. **PEDAGOGICAL RESEARCH.** For teachers and advanced students. Various school problems will be taken up for exhaustive study, thus offering opportunity for an insight into the organization of the school not usually open to undergraduate students. The work will be by topics and largely individual. Special facilities for original investigation will be at the command of students showing themselves competent to do such work. As only a small number of students can be accommodated applications for admission should be made as soon as possible. Twice a week.

73. **MODERN EDUCATIONAL SYSTEMS OF EUROPE.** A brief historical and statistical study of secondary education in Germany, France and England. The work will be based upon such texts as Russel's *German Higher Schools*, Holman's *English National Education*, and will consist of recitations and reports upon original topics. Open to all students. Twice a week.

Second Semester

52. **MODERN EDUCATIONAL THEORIES.** These theories will be studied from three points of view: (1) As the expression of a certain philosophy of life; (2) from the point of view of their consistency; and (3) from that of their truth. The work is based on Quick's *Educational Reformers*. Twice a week.

54. **PLATO'S REPUBLIC.** This course is essentially seminary work for the benefit of those students of Course 53 who wish to make a critical study of Plato's *Philosophy of Education*. Twice a week.

56. **THE KINDERGARTEN.** This course is intended especially for those who are preparing to do kindergarten and primary work, and to be superintendents of schools. Twice a week.

58. **THE PHILOSOPHY OF EDUCATION.** This course aims to make a systematic exposition of the philosophy of education. Four times a week.

60. **EDUCATION IN THE UNITED STATES.** A comparative study of secondary education in the United States and Europe presupposing Course 73. Twice a week.

68. A continuation of 67. Twice a week.

70. A continuation of 69. Twice a week.

72. **PEDAGOGICAL RESEARCH.** Continuation of Course 71. Open to students credited with 59 or 71. Twice a week.

ELECTRICAL ENGINEERING

[ELECTRICAL HALL, Room 9 and Laboratory]

Associate Professor Caldwell, Mr. Fish

2. **ELECTRICAL ENGINEERING.** Lectures, Recitations and Problems. Theory of dynamo-electric machinery, including direct current and alternating current generators and motors; methods of regulation and control; circuits, lamps and auxiliary apparatus; storage batteries: applications of electricity to street car and mine working; design, construction, and management of plant. Five times a week. First, second and third terms.

3. **ELECTRICAL DESIGNING.** Including D. C. and A. C. generators and motors, transformers, distribution, etc. Three times a week, through the year.

4. **ELECTRICAL LABORATORY.** A full experimental course in the handling and testing of generators, motors, storage batteries, circuits, etc. Three half days a week. First, second and third terms.

6. **ELECTRICAL ENGINEERING.** Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and applications. Twice a week. (First and second terms of fourth year of Civil, Mining and Mechanical Engineering Courses.)

7. **ELECTRICAL ENGINEERING.** Laboratory work on the subjects treated in Course 6, which it accompanies. Twice a week. (First and second terms and fourth year in Civil, Mining and Mechanical Engineering Courses.)

ENGLISH LITERATURE

[UNIVERSITY HALL, Room 31]

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Professor Barrows, Assistant Professor Taylor

First Semester

51. **AN INTRODUCTION TO ENGLISH LITERATURE.** Four times a week. (Must precede all other courses in this semester.)

53. **POETRY FROM SPENSER TO MILTON, EXCLUSIVE OF THE DRAMA.** Twice a week. *Omitted in 1899-1900.*

55*a*. **THE BIBLE.** Old Testament. Once a week. *Given in 1901-2.*

55*b*. **THE BIBLE.** Old Testament. Once a week. *Given in 1899-1900.*

55*c*. **THE BIBLE.** New Testament. Once a week. *Given in 1900-1.*

57. **SHAKESPEARE.** Three times a week.

59. **THE NOVEL.** Three times a week. *Omitted in 1900-1.*

61. **FROM DRYDEN TO JOHNSON.** Twice a week. *Omitted in 1900-1.*

63. **PROSE FROM COWPER TO THE VICTORIAN AGE, EXCLUSIVE OF FICTION.** Three times a week. *Omitted in 1899-1900.*

65. **MASTERPIECES.** Three times a week. If elected, must be carried through the year. Open to competent graduates, and to undergraduates who have already taken three elective courses in this department.

67. **CHAUCER.** Twice a week.

69. **LITERARY PROBLEMS.** Twice a week. Required in the third or fourth year of students whose major study is in this department.

71. **VICTORIAN LITERATURE.** Prose. Three times a week. *Omitted in 1900-1.*

Second Semester

52. **REPETITION OF COURSE 51.** Four times a week. (Pre-requisite to all electives in this Semester.)

54. **PROSE FROM SPENSER TO MILTON.** Twice a week. *Omitted in 1899-1900.*

56*a*. **THE BIBLE.** Once a week. Continuation of Course 55*a*. *Given in 1901-2.*

56*b*. **THE BIBLE.** Once a week. Continuation of Course 55*b*. *Given in 1899-1900.*

56*c*. **THE BIBLE.** Once a week. Continuation of Course 55*c*. *Given in 1900-1.* The study of the English Bible may be continued through three years.

58. **THE DRAMA FROM THE MIRACLE PLAYS TO THE CLOSING OF THE THEATRES.** Three times a week.

60. **THE DRAMA SINCE THE RESTORATION.** Twice a week. *Omitted in 1900-1.*

62. **AMERICAN AUTHORS.** Three times a week. *Omitted in 1900-1.*

64. **POETRY FROM COWPER TO THE VICTORIAN AGE. EXCLUSIVE OF THE DRAMA.** Three times a week. *Omitted in 1899-1900.*

66. **MASTERPIECES.** Three times a week. Must be preceded by Course 65. Open to competent graduates and to under-graduates who have already taken three elective courses in this department.

68. **TRANSLATIONS.** Twice a week. *Omitted in 1899-1900.* A graduate course, but open also to under-graduates who obtain permission to take it.

70. **LITERARY PROBLEMS.** Twice a week. A continuation of Course 69. Required in the third or fourth year of students whose major study is in this department.

72. **VICTORIAN LITERATURE: POETRY.** Three times a week. *Omitted in 1900-1.*

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE — OR TERM COURSES

21. **SHAKESPEARE.** Three times a week. First term. The same as 57, except that it is limited to the first term.

22. **AMERICAN AUTHORS.** Three times a week. Second term. Open to those who take Course 23.

23. **AMERICAN AUTHORS.** Three times a week. Third term. Open to those who have taken Course 22.

Courses 22 and 23 together are the same as Course 62, with a special introduction filling the first twelve weeks of the second term.

All the Semester electives, from 53 to 65, are open to students who may wish to do a full year of work in this department, or who may wish to give one semester to this department and one to any other; but courses 21, 22, and 23 can be elected by those only who wish to take part of a year's work on the term plan. Course 52 is pre-requisite to all electives.

ENTOMOLOGY

(*See* Zoology and Entomology)

EUROPEAN HISTORY

(*See* History)

GENERAL CHEMISTRY

(*See* Chemistry)

GEOLOGY

[ORTON HALL, Rooms 5, 4, 7 and 13]

Professor Orton, Associate Professor Prosser, Associate Professor Bownocker

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **COSMICAL GEOLOGY.** Lithological Geology, Dynamical and Structural Geology. Books of reference used in preparation of their work: Green's *Physical Geology*, Geike's *Text-book of Geology*, LeConte's *Elements of Geology*, Hunt's *Chemical Geology*, Daubree's *Geologic Experimentale*. Five times a week.

53. **PALEONTOLOGY.** Museum work. Determination of groups of Ohio fossils.

55. **PETROGRAPHY 1.** Laboratory and Lectures. Optical crystallography, with practical determination of rock-forming, macroscopically and microscopically. Study of the igneous rocks in the hand specimen and thin section. Twice a week. The Sturtz rock collection and Voight-Hochgesang thin sections of typical minerals and rocks will be carefully studied. Books of reference: Mitchel Levy — *Les Minneaux des Roches;* Rosenbusch — *Mikroscopische Physiographie der Petrographisch Wichtigen Mineralien*, 3d ed.; *Mykroschpische Physiographie der Massigen Gesteine*, 2d ed.; Teall's *British Petrography;* Spottiswoode's *Polarization of Light.* Pre-requisites: Chemistry, 51 and 52; Metallurgy, 52 (Mineralogy and Crystallography).

Second Semester

52. **PALEONTOLOGICAL GEOLOGY.** Historical Geology. Books of reference used by students in preparation of their work: Nicholson's *Paleontology*, Zittel's *Paleontologie, Ohio Geological Reports, Paleontology of New York.* Five times a week.

54. Continuation of Course 53.

56. Continuation of Course 55. Twice a week.

58. **GEOGRAPHIC GEOLOGY.** The origin, development, and destruction of topographic forms. Rivers, lakes, oceans, ice, and winds as agents modifying the surface of the earth. The great ice age in North America. [Primarily for teachers.]

Books of references; Journal of Geology; American Geologist; The great Ice Age; (Geike's) The Ice Age in North America; (Wright) The Reports of the United States Geological Survey; The maps of the Mississippi River Commission, etc. Five hours per week. Lectures, recitations, map work. Third term.

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **PHYSICAL GEOGRAPHY.** Lectures and recitations. Geikie's *Elementary Lessons*, supplemented by lectures, map drawing, and the study of geographical models. Five times a week. Third term.

2. **GENERAL GEOLOGY.** Cosmical Geology, Lithological Geology, Dynamical and Structural Geology. Books of reference used by students in preparation of their work: Green's *Physical Geology*, Geikie's *Text-book of Geology*, LeConte's *Elements of Geology*, Hunt's *Chemical Geology*, Daubree's *Geologie Experimentale.* Five times a week. First term.

Paleontological Geology, Historical Geology. Books of reference used by students in preparation of their work: Nicholson's *Paleontology*, Zittel's *Paleontologie, Ohio Geological Reports, Paleontology of New York.* Five times a week. Second term.

3. **ECONOMIC GEOLOGY.** Lectures. Economic materials of stratified rocks, clays, limes, cements, coals, iron, ores, etc., phosphates, petroleum. Economic materials derived from veins and igneous rocks, gold, silver, copper, mercury. Gems. Books of reference used by students in preparation of their work: *Publications of U. S. Geological Survey, State Geological Surveys*, Phillips' *Ore Mining.* Five times a week. Third term.

4. **ELEMENTARY GEOLOGY.** Lectures and recitations. Text-book: LeConte's *Class Book of Geology.* Five times a week. Second term.

GERMANIC LANGUAGES AND LITERATURES

[UNIVERSITY HALL, Rooms 32 and 33]

Professor Eggers, Associate Professor Mesloh

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ELEMENTARY GERMAN.** Four times a week.

53. **SCIENCE READING.** Twice a week.

GERMAN LITERATURE. Lectures upon outline of German Literature. Reading of Selections. Four times a week.

THE GERMAN DRAMA. Lectures and reading of Selections. Three times a week.

FAUST I. Twice a week. (Can be taken only by those who propose to take 60.)

MIDDLE HIGH GERMAN. Mediæval Lyrics. Twice a week.

DEUTSCHE CULTURGESCHICHTE. Lectures in German. Once a week.

COLLOQUIAL EXERCISES. For advanced students. Twice a week.

GOTHIC. Wright's Primer. The relation between Gothic and allied languages will be considered. Twice a week.

OLD NURSE. Lectures on Grammar and reading of Sagas.

The last two courses will alternate.

SANSKRIT. Perry's *Primer*. Lectures introductory to the study of Indo-Germanic philology.

Second Semester

Continuation of Course 51. Four times a week.

Continuation of Course 53. Twice a week. Course 53 and 54 must have been preceded by Courses 51 and 52.

GERMAN LYRICS. Lectures and reading of Selections. Three times a week. Courses 55 and 56 must have been preceded by Courses 51 and 52.

THE GERMAN PROSE. Lectures and reading of Selections. Three times a week. 57 and 58 must have been preceded by 51, 52, 55 and 56.

FAUST II. Twice a week.

MEDIÆVAL EPICS. Twice a week.

DEUTSCHER AUFSATZ. Once a week.
Courses 59, 60, 61, 62, 63 and 64 can be taken only with the approval of Professor Eggers; and must have been preceded by Courses 51, 52, 55 and 56, or their equivalents.

COLLOQUIAL EXERCISES. For advanced students. Twice a week.

OLD HIGH GERMAN. Lectures on Grammar and Literature. Reading of Selections. Twice a week.

COMPARATIVE GRAMMAR. Lectures. Twice a week.
The last two courses will alternate.

Continuation of Course 71.

COLLEGE OF AGRICULTURE, ENGINEERING AND PHARMACY

ELEMENTARY. Four times a week, through the year.

SCIENCE READING. Twice a week, through the year.

GERMAN LITERATURE. Four times a week, through the year.

GREEK LANGUAGE AND LITERATURE

[UNIVERSITY HALL, Room 37]

Professor Smith, Associate Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

ELEMENTARY GREEK. White's *First Greek Book* and one or two books of Xenophon's *Anabasis*. This course is designed to meet, partially, the wants of those who are deficient in the Greek required for admission. It cannot receive University credit. Five times a week, through the year.

First Semester

51. **XENOPHON'S** *Hellenica*. Greek Prose Composition. Four times a week.
53. **LYSIAS** — Select Orations (Morgan). Attic Antiquities. Four times a week.
57. **HOMER** — *Iliad* I-VI. Lectures on Epic Poetry. Three times a week.
59. **LECTURES ON HISTORY OF ANCIENT ART.** Twice a week.
61. **THE ATTIC DRAMA.** Lectures, collateral readings, and quiz. Twice a week.

Second Semester

52. **HERODOTUS** — Book VII, Myers' *History of Greece*. Four times a week.
54. **HOMER** — *Iliad*. Four times a week.
58. **SOPHOCLES'** *Oedipus Rex*. Lectures on Attic Drama. Three times a week.
60. Continuation of Course 59.
62. **THE ATTIC DRAMA.** Rapid reading of two or three plays. Twice a week. Must be preceded by 61.

COLLEGE OF ENGINEERING

1. **LECTURES ON HISTORY OF ANCIENT ART.** Twice a week, through the year. *Not given in 1900-'01.*

HISTORY

AMERICAN HISTORY

[UNIVERSITY HALL, Rooms 27 and 18]

Professor Knight, Dr. J. B. Sanborn

EUROPEAN HISTORY

[UNIVERSITY HALL, Room 7]

Associate Professor Siebert

Course 55 (or 56) must precede all other courses in American History, and those intending to take advanced courses in American History should take Courses 53 and 54 (English History) as early as possible in their course.

Courses 51 and 52, in the order named, must precede all other courses in European History, except Courses 53 and 54.

First Semester

GENERAL HISTORY OF EUROPE TO THE CLOSE OF THE MIDDLE AGES. Lectures, text-book and collateral readings. Adams, *Civilization during the Middle Ages.* Three times a week. Two sections.

POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND TO THE ACCESSION OF THE STEWARTS. Lectures, text-book and assigned readings. Gardiner's *Student's History of England.* Three times a week.

POLITICAL HISTORY OF THE UNITED STATES. Lectures, text-books and prescribed readings. Hart's *Formation of the Union;* Wilson's *Division and Reunion.* Four times a week. This course is repeated in the Second Semester (as Course 56). Of students who are required to take this subject, those whose names begin with the letters from A to K will take it in the First Semester; others will take it in the Second Semester (as Course 56). Two sections.

HISTORY OF EUROPE FROM 1789 TO 1815. The French Revolution. Lectures, recitations and collateral reading. Stephen's *Europe, 1789-1815.* Three times a week.

ROMAN HISTORY AND INSTITUTIONS. Lectures, text-book, collateral reading and special reports. Pelham, *History of Rome.* Twice a week.
Given biennially. Not offered in 1899-1900.

PRO-SEMINARY FOR RESEARCH WORK IN AMERICAN HISTORY AND POLITICAL SCIENCE. Two hours a week (at one meeting.)
All students who elect their Major Study in the department of American History and Political Science must take this course in the fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

AMERICAN COLONIAL HISTORY. Lectures and quizzes upon lectures and assigned reading. Three times a week.

CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES. 1850-1876. Secession, Civil War and Reconstruction. Lectures and assigned readings. Three times a week.
Given biennially. Not offered in 1899-1900.

HISTORY OF EUROPEAN COLONIES. A study of the colonial development of Portugal, Spain, England, the Netherlands, France and Germany during the fifteenth, sixteenth and seventeenth centuries. Lectures, assigned reading and special reports. Twice a week.

Second Semester

GENERAL HISTORY OF EUROPE FROM THE CLOSE OF THE MIDDLE AGES TO THE FRENCH REVOLUTION. Lectures, text-book and collateral reading. Duruy's *Modern History.* Three times a week. Two sections.

POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND FROM THE ACCESSION OF THE STUARTS TO THE PRESENT TIME. Lectures, text-book and assigned readings. Gardiner's *Student's History of England.* Three times a week.

56. **POLITICAL HISTORY OF THE UNITED STATES.** Lectures, text-books and prescribed reading. Hart's *Formation of the Union;* Wilson's *Division and Reunion.* Four times a week. [This is a repetition of Course 55 and will be taken as the Second Semester by those students (of whom it is required) whose names begin with letters from L to Z.] Two sections.

58. **HISTORY OF EUROPE SINCE 1815.** Lectures, text-book and assigned reading. Fyffe's *Modern Europe.* Three times a week.

60. **HISTORY OF THE PERIOD OF THE PROTESTANT REFORMATION.** Lectures, text-books, collateral reading and special reports. Hausser's *Era of the Reformation.* Twice a week.
Given biennially. Not offered in 1899-1900.

62. **PRO-SEMINARY FOR RESEARCH WORK IN AMERICAN HISTORY AND POLITICAL SCIENCE.** Two hours a week (at one meeting.)
This is a continuation of Course 61, and is open only to those who have had Course 61. All students who elect their Major Study in the department of American History and Political Science must take this course in the fourth year. Open, as elective to other students, graduate and advanced undergraduate, on permission of the instructor.

64. **CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES.** The Formative Period, 1776-1815. An advanced course. Lectures and assigned readings and investigations. Three times a week.

68. **AMERICAN DIPLOMATIC HISTORY.** History of the foreign relations, policy, and treaties of the United States. Lectures and special investigations. Three times a week.
Given biennially. Not offered in 1899-1900.

70. **HISTORY OF EUROPEAN COLONIES.** History of colonization by the important states of Europe during the eighteenth and nineteenth centuries. Lectures, assigned reading and special reports. Twice a week.
Courses 5 and 6 in History in the College of Agriculture and Domestic Science are the same as Courses 55 and 56 in History described above.

HORTICULTURE

[Horticultural Hall]

Professor Lazenby, Mr. Cunningham

1. **ELEMENTS OF HORTICULTURE.** Lectures and practice in laboratory, greenhouse, gardens, orchard, ornamental grounds and forest. A study of special garden crops, preparation of soil, drainage and irrigation, fertilizers, tools and implements, buildings and weeds.
Propagation, multiplication, germination, transplanting, budding, grafting and pollinating.
Greenhouse construction and management; crops of the vegetable forcing-house.

5. **POMOLOGY AND VITICULTURE.** Four times a week. First term.

6. **WINTER GARDENING AND THE NURSERY.** Four times a week. Second term.

7. **SMALL FRUIT CULTURE.** Including the theory and practice of spraying plants. Four times a week. Third term.

8. **ELEMENTS OF FLORICULTURE.** History and description of flowering plants. Twice a week. First term.

9. **COMMERCIAL FLORICULTURE.** Twice a week. Second term.

10. **AMATEUR OR HOME FLOWER GARDENING.** Management of house plants, ferneries, wardian cases, climbing vines and flowering bulbs. Twice a week. Third term.

11. **ARBORICULTURE.** Lectures and field work. A study of native trees and shrubs; their uses for shelter, shade and ornament; method of propagation, culture. Twice a week. First term.

12. **FORESTRY.** Lectures and recitations. A study of the influence of forests upon soils, crops and climate; value of trees for timber; how to improve existing woodland; establishment and management of plantations of forest trees; forestry in Europe. Twice a week. Second term.

13. **LANDSCAPE GARDENING.** Lectures and practice. The principles of æsthetics as applied to natural scenery; the adornment of home and public grounds, including landscape engineering, landscape architecture and landscape horticulture. Twice a week. Third term.

INDUSTRIAL ARTS AND SHOPWORK

[HAYES HALL, Rooms 9, 12, 17, 18, 5 and 6]

INDUSTRIAL ARTS

Professor Sanborn, Mr. Knight, Mr. ———, Mr. ———

1. **TOOLS. MACHINES.** Lectures and recitations on hand and machine tools and the principles of mechanism and mechanics underlying their design, construction and operation. Three times a week.

2. **DESIGNING.** Problems in drawing and design to accompany Course 1. Three drawing periods a week.

3. **SHOP EQUIPMENT, APPLIANCES AND MANAGEMENT.** A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction: shop and factory buildings and their construction; power, power transmission and prime movers; automatic machines and other special devices for turning out cheap and accurate work; methods of compensation and shop accounts and management. Three times a week.

4. **ADVANCED DESIGNING.** Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacturing plants; to accompany Course 3. Three drawing periods a week.

5. **WORKSHOP AND APPLIANCES.** Lectures and problems on the construction of shop buildings and the arrangement of machinery: power required and the means of transmission; friction in line-shafting and the efficacy of machinery; automatic machines and special shop appliances. Three times a week.

6. **MACHINE DESIGN.** Application of the principles of mechanics and strength of materials to the problems of machine designing. Five times (ten hours' practice) a week.

SHOPWORK

1. **CARPENTRY AND PATTERN MAKING.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary moulding to illustrate draft, parting, cores, etc.

2. **FORGING.** Exercises and practice in iron and steel forging, including such operations as drawing, bending, forming, upsetting, welding and the making and tempering of punches, drills, chisels, lathe tools and springs.

3. **FOUNDRY WORK.** Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass, and the pouring of castings.

4. **CHIPPING AND FILING.** Exercises and practice in vise work, including chipping in cast and wrought iron; surface filing, squaring, fitting, finishing, and the scraping of surface plates.

7. **CARPENTRY AND PATTERN MAKING.** Similar to Shopwork 1.

8. **CARPENTRY: CABINET WORK.** Exercises and practice in cabinet making including panelling, mitre and dovetail joints, etc.; use of power tools.

9. **ADVANCED PATTERN MAKING.** Continuation of pattern work of Shopwork 7.

10. **CARPENTRY: BUILDING.** Advanced work in carpentry including use of two foot steel square in laying out of rafters, roof trusses, joists, etc.; stair building; doors, window frames, etc.

11. **FORGING.** Similar to Shopwork 2.

12. **ADVANCED FORGING.** Tool making, tempering of taps, dies, cutters, etc.; annealing; case hardening; ornamental iron work, etc.; visits to shops.

13. **MACHINE WORK.** Exercise and practice in hand-turning in iron and brass on speed lathes; and straight and taper turning, boring, fitting, chucking, thread-cutting, etc., on engine lathes.

14. **MACHINE WORK.** Exercises and practice on the lathe, planer, shaper, drill press and milling machine, with use of small tools as drills, taps, dies, reamers, counterbores, etc.; construction of parts of actual machines.

15. **ADVANCED MACHINE WORK.** Exercises and practice on turret lathe, universal, surface and tool grinding machines, gear cutting, etc.

16. **ADVANCED MACHINE WORK.** The construction and use of jigs and templates; the accurate laying out of work; the duplication of parts, the production of work rapidly and economically, etc.

17. **ADVANCED MACHINE WORK.** The making and use of special tools and fixtures, standard plugs and collars, standard caliper and limit guages; error limits in modern machine construction; methods of testing the accuracy of machine tools; etc.

SHOPWORK REQUIRED

Number	Credit	Year	Term	Courses in
1	3	1	2	Ag.: Hort.: Ag. (short).
2	3	2	2	Ag.: Hort.
3	2	2	1	M. E.: I. A. (short).
	3	2	1	I. A.
4	2	2	1	E. E.
	3	3	1	I. A.
	3	2	1	I. A. (short).
	3	2	2	M. E.
	2	1	3	Cer. (short).
	2	2	3	E. M.: Cer.
7	3	1	1	Arch.: I. A.: I.A.(short).
	3	2	1	Chem.
	2	2	1	Cer.: E. M
	4	1	3	E. E.: M. E.
8	3	1	2	Arch.: I.A.: I.A.(short).
9	3	1	3	I. A.
10	3	1	3	Arch.
11	2	2	1	E. E.
11	3	2	1	M. E.
	2	2	2	Cer.: E. M.
	2	2	2	Chem.: I. A.
	3	1	3	Cer. (short): I. A.(short).
	3	2	3	Min. (short).
12	3	2	3	I. A.
13	3	3	1	E. E.
	3	3	2	I. A.
	5	2	2	I. A. (short).
	3	2	3	M. E.
14	3	3	1	M. E.
	3	3	2	E. E.
	3	3	3	I. A.
15	3	4	1	I. A.
	4	3	2	M. E.
	5	2	3	I. A. (short).
16	3	4	2	I. A.
17	3	4	3	I. A.

LATIN

[UNIVERSITY HALL, Rooms 29, 28 and 39]

Professor Derby, Associate Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 51, 52, 53, and 54 in the order named must precede the Elective Courses 55, 56, 57, 58, 61, 62, 63, 64, 65, 66.

FIRST SEMESTER

51. LIVY — BOOKS 1 AND 2; CICERO — *Cato Major* or *Laelius.* Four times a week.

53. HORACE— *Odes Satires* and *Epistles;* **TACITUS,** *Agricola.* Four times a week.

55. ROMAN HISTORIANS — SALLUST *Bellum Jugurthinum;* **TACITUS,** — *Annales;* **SUETONIUS.** Three times a week.

57. ROMAN PHILOSOPHY. Three times a week. *(Not offered in 1899–1900).*

59. PHARMACEUTICAL LATIN. Five times a week.

61. LINGUISTICS AND INSCRIPTIONS. Two times a week. *(Not offered in 1899–1900).*

63. TEACHERS' COURSE— PROSE COMPOSITION. Two times a week.

63*a*. Supplementary to Course 63. May be taken only by permission of instructor. Once a week.

65. ROMAN RHETORIC AND ORATORY. Three times a week. *(Not offered in 1899–1900).*

67. GREEK AND ROMAN ANTIQUITIES. Lectures, illustrated. Two times a week.

SECOND SEMESTER

52. **EARLY LATIN COMEDY — PLAUTUS AND TERENCE.** Four times a week.

54. **PLINY'S** *Letters;* **JUVENAL** *Satires.* Four times a week.

56. **ELEGIAC POETS — CATULLUS, TIBULLUS, PROPERTIUS.** Three times a week.

58. **OVID,** *Ramsay's Selections;* **LUCAN. BOOK I.** Three times a week.

60. **PHARMACEUTICAL LATIN** — Continuation of Course 59. Five times a week.

62. Continuation of Course 61. Two times a week.

64. Continuation of Course 63. Two times a week.

64*a*. Continuation of Course 63*a*. Once a week.

66. **LATER LATIN WRITERS.** Three times a week. (Not offered in 1899-1900).

68. **GREEK AND ROMAN ANTIQUITIES.** Lectures, illustrated. Two times a week.

COLLEGE OF PHARMACY

1. **PHARMACEUTICAL.** Five times a week. First, second and third terms.

LAW

[ORTON HALL, Room 7 and Basement Room]

FIRST YEAR

FIRST SEMESTER

Elementary Law (Robinson, Walker and Blackstone).

SECOND SEMESTER

Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

FIRST SEMESTER

Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

SECOND SEMESTER

Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

THIRD YEAR

FIRST SEMESTER

Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Fetter).

SECOND SEMESTER

Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones); Suretyship (Baylies).

MATHEMATICS

[UNIVERSITY HALL, Rooms 39, 41, 43 and 45]

Professor Bohannan, Associate Professor McCoard, Assistant Professor Arnold, Assistant Professor Swartzel, Mr. Rasor, Miss Ball

A. TERM COURSES

1. **ELEMENTARY ALGEBRA.** *Venable.* Five times a week. First term. (Short Course in Agriculture).

3. **PLANE GEOMETRY.** *Venable.* Five times a week. First or second terms.

3a. **PLANE GEOMETRY.** *Venable.* Five times a week. Second term. (Short Courses in Agriculture and Clay-working.)

13. **SOLID GEOMETRY.** *Venable.* Five times a week. Second term.

14. **PLANE TRIGONOMETRY.** *Loney.* Five times a week. First or third terms.

15. **ANALYTICAL AND SPHERICAL TRIGONOMETRY.** *Loney*, with notes on Spherical Trigonometry. Twice a week. Second term.

16. **COLLEGE ALGEBRA.** *Taylor.* Three times a week. Second term.

17. **PLANE ANALYTICS.** *Loney.* Five times a week. Third term.

18. **ANALYTICS AND DIFFERENTIAL CALCULUS.** *Loney, Venable, Edwards.* Five times a week. First term.

19. **DIFFERENTIAL CALCULUS.** *Edwards.* Five times a week. Second term.

20. **INTEGRAL CALCULUS.** *Edwards.* Five times a week. Third term.

11. **DIFFERENTIAL EQUATIONS.** *Edwards.* Once a week. First term.

8. **LEAST SQUARES.** *Merriman.* Twice a week. First term.

B. SEMESTER COURSES

FIRST SEMESTER

55. **PLANE TRIGONOMETRY** (*Loney*) and 57, **ALGEBRA** (*Taylor*). Five times a week.

59. **ANALYTICS** (*Loney, Venable*) and 61, **DIFFERENTIAL CALCULUS** (*Edwards*). Five times a week.

63. **ADVANCED MATHEMATICS.** Topics will be changed from year to year to meet the wishes of the students. Selections may be made from the following courses: (a) Advanced Calculus (*Picard, Houel*); (b) Differential Equations (*Johnson, Murray, Forsythe, Craig*); (c) Higher Plane Curves (*Salmon*); (d) Advanced Analytical Geomentry (*Casey, Salmon*); (e) Analytical Geometry of Three Dimensions (*Chas. Smith, Frost, Salmon*); (f) Theory of Equations (*Burnside and Panton*); (g) Modern Higher Algebra (*Chrystal, Salmon, Serret, Cole's Netto*); (h) Modern Geometry (*Cremona, Reye, Steiner, Von Staudt, Chasles*); (i) Determinants (*Muir*); (j) Elliptic Functions (*Weber, Halphen, Durege, Hermite, Greenhill, Briot and Bouquet*); (k) General Theory of Functions (*Forsythe, Harkness and Morley, Tannery, Weierstrass, Durege, Thoame, Biermann*); (l) Potential Functions (*Clausius, Riemann, Dirichlet, Peirce*); (m) Mathematical Theory of Electricity (*Mascart and Foubert*), (n) Higher Geodesy (*Clarke, Helmert, Jordan*); (o) Spherical Harmonics (*Byerly, Ferrers, Heine*); (p) Mathematical Optics; (q) History of Mathematics. Credit, one to ten hours.

65. **PROBLEMS ON ALL PAST WORK.** Once a week.

67. **ALGEBRA, ANALYTICS, CALCULUS.** Three times a week.

SECOND SEMESTER

56. **ALGEBRA** (*Taylor*), and 58, **PLANE ANALYTICS** (*Loney*). Five times a week.

60. **CALCULUS AND** 62, **DIFFERENTIAL EQUATIONS.** (*Edwards.*) Five times a week

64. Continuation of Course 63. Credit, one to ten hours.

66. Continuation of Course 65. Once a week.

68. **TRIGONOMETRY, ANALYTICS, CALCULUS.** Three times a week.

MECHANICAL ENGINEERING

[HAYES HALL, Room 12; MECHANICAL HALL, Second Floor]

Professor Magruder, Associate Professor Hitchcock, Mr. Hale

8. **MECHANISM.** Lectures and recitations on the principles of mechanism and mechanical movements. Five times a week. Second term.
The accurate laying out of movements, embodying the principles of mechanism. Twice a week. Third term.

6. **ANALYTICAL MECHANICS.** Five times a week. First and second terms.

7. **STRENGTH OF MATERIALS.** Recitations and lectures on the elastic and ultimate resistance of the materials of engineering to stress and their use in structures and machines. Lectures on elementary hydraulics and the flow of water through orifices and pipes over weirs, and in streams, and on measuring the same. Five times a week. Third term.

8. **THERMODYNAMICS.** Lectures and recitations on the transformation of heat and mechanical energies. Ideal indicator diagrams of steam, air and gas engines; the flow of gases through pipes and orifices. Five times a week. Third term.

9. **PRIME MOVERS.** Lectures and recitations on steam and gas engines, turbine water wheels, valve movements and governors; their construction, operation, efficiency and economy. Five times a week. First term.

10. **STEAM BOILERS.** Lectures and recitations on steam boilers, furnaces, automatic stokers, gas producers and boiler appliances; their construction, operation, efficiency and economy. Five times a week. Second term.

12. **EXPERIMENTAL ENGINEERING LABORATORY.** Twice a week. First term. Third year.

13. The same. Four times a week. First term. Fourth year.

14. The same. Four times a week. Second term. Fourth year.

15. The same. Three times a week. Third term. Fourth year.

16. The same. Four times a week Third term. Third year, Electrical Engineering.

17. The same. Three times a week. Second term. Fourth year, Civil Engineering.
Courses 12, 13, 14, 15, 16, 17, 24 and 25, in the Experimental Engineering Laboratory are arranged to meet the needs of the different students in

obtaining experimental practice in the use and calibration of accurate measuring instruments; in testing illuminating and lubricating oils for friction, endurance, and the like; in the calibration and adjustment of guages and springs; in testing the strength and elasticity of the materials of construction in tension, compression, torsion, flexure, shear, and impact; in the flow of liquids and gases; in the use of the steam separators, injectors, steam pipe coverings; belt, rope and chain gearing; in setting valves and eccentrics; in making efficiency tests of simple and compound, condensing and non-condensing steam engines; of pulsometer steam and centrifugal pumps; of hydraulic rams and of impulse and turbine water wheels.

18. **MACHINE DESIGN.** Recitations on Unwin's *Machine Design*, with lectures on American Practice. Five times a week. First and second terms.

20. **HYDRAULIC MACHINERY.** Recitations and lectures on pumping machinery. Twice a week. Third term.

21. **THESIS WORK.** Five times a week. Third term.

22. **TIMBER AND MASONRY.** Lectures on the construction of foundations and structures in timber and masonry. Five times a week, the last three fifths of second term.

23. **MATERIALS OF CONSTRUCTION.** Lectures on the materials used in architecture and building construction, and laboratory exercises on their properties. Five times a week. First term.

24. **EXPERIMENTAL ENGINEERING LABORATORY.** Three times a week. First and second terms. Elective for third year and fourth year engineers.

25. **EXPERIMENTAL ENGINEERING LABORATORY.** Three times a week. Third term. Fourth year, Civil Engineering.

26. **STEAM MACHINERY.** Once a week. Course in Dairying.

METALLURGY AND MINERALOGY

[CHEMICAL HALL, Rooms 4 and 3]

Professor N. W. Lord, Mr. Somermeir

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

52. **MINERALOGY.** Lectures, with frequent quizzes on notes and with study of specimens in the collection of minerals. A short introductory course is given on crystallography, illustrated by wooden models. Text-book: Dana's *Manual Mineralogy and Lithology*. Last nine weeks of Second semester.

COLLEGE OF ENGINEERING

2. **MINERALOGY.** Lectures. Similar to Course 52 in College of Arts, Philosophy and Science, but more practical, and arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three times a week. Third term.

3. **DETERMINATIVE MINERALOGY.** Laboratory course in practical determination of minerals by physical and chemical tests. Each student is furnished with a set of apparatus, and works under an instructor's inspection. Brush's *Determinative Mineralogy* is used as a manual. Five times a week. Third term.

4. **METALLURGY.** A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the modes of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five times a week. First and second terms.

5. **METALLURGICAL LABORATORY.** Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuels and slags, and the assays of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical works. Course 5 must be preceded by Agricultural Chemistry, Courses 1, 8, 9; or by General Chemistry, Courses 7 and 12. Five laboratory periods a week. Three terms.

6. **ASSAYING.** Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Oral instruction, with reference to standard books on assaying. Five laboratory periods a week. Second term.

7. **METALLURGICAL CONSTRUCTION.** Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three times a week. First term. (Professors Lord and Ray.)

8. **ORE DRESSING AND COAL WASHING.** Lectures. Instruction in the methods of concentrating and enriching ores and fuels by mechanical means. Lectures with reference to Rittinger's *Aufbereitung;* Callon's *Course d' Exploration des Mines;* Kunhardt's *Ore Dressing,* and various papers in technical journals. Twice a week. First term.

9. **MINERAL CHEMISTRY.** Lectures and laboratory practice. Lectures upon fire damp, mine explosions, explosives, boiler, waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five hours a week. Third term.

MILITARY SCIENCE AND TACTICS

[ARMORY]

Lieutenant Martin

1. **MILITARY DRILL.** Three times a week through the year.
2. **TACTICS.** Lectures and recitations. Twice a week. Second term.
3. **ART OF WAR.** Lectures and recitations. Twice a week. Second term.

MINE ENGINEERING

[CHEMICAL HALL, Room 26]

Associate Professor Ray

ELEMENTARY ALGEBRA. (Mathematics 2.) Wentworth. Five times a week. Three terms.

1. **MINE SURVEYING.** Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing-room. Five times a week. First term.

2. **VENTILATION AND HAULAGE.** Lectures illustrated by experiments and maps of mines and models when possible, tests by safety lamps and anemometers, and solution of air distribution in coal mines. Five times a week. Second term.

3. **MINE OPERATING.** A course of lectures and practical instruction in mine book-keeping and accounts, cost of working, etc., particularly adapted to Ohio coal mining. Five times a week. Third term.

4. **MINE SURVEYING.** Field practice in the use of instruments for surface and underground surveys. Full notes are taken, and maps and plans made in the drawing-room. Davie's *Surveying*, by Van Amringe, is used as a text-book. Five times a week. First term.

5. **MINE ENGINEERING.** Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five times a week through the year.

6. **PLANS AND SPECIFICATIONS.** Five times a week. Third term. [Professors Lord and Ray.]

PHARMACY

[CHEMICAL HALL, Rooms 13 and 12]

Professor Kauffman, Assistant Professor Dye

6. **PHARMACY.** General pharmaceutical processes. Lectures three times a week. First term.

7. **PHARMACY.** United States Pharmacopeia official preparations. Lectures twice a week. Laboratory practice daily. Second term.

8. **DISPENSATIONS.** Official preparations. Lectures twice a week. Laboratory practice daily. Third term.

9. **PHARMACEUTICAL CHEMISTRY.** Unofficial preparations. The National Formulary. Lectures twice a week. Laboratory practice daily. First term.

10. **EXTEMPORANEOUS PHARMACY.** Prescription practice. Lectures once a week. Laboratory practice three times a week. Second term.

11. **GENERAL PRACTICE.** Lectures twice a week. Dispensing practice daily. Prescription practice daily. Third term.

12. **MATERIA MEDICA.** Official drugs and classification. Three times a week. First term.

13. **MATERIA MEDICA.** Official and unofficial drugs. Three times a week. Second term.

14. **MATERIA MEDICA AND THERAPEUTICS.** Synthetic Products. Poisons and Antidotes. Three times a week. Third term.

15. **PHARMACEUTICAL ASSAYING.** Three times a week. First term.

16. **METHODS OF MANUFACTURE.** Three times a week. Second and third terms.

17. **GENERAL PHARMACY.** Two lectures, three laboratory periods a week. Through the year.

18. **LABORATORY.** Special work for veterinary students. Five times a week. Third term.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

(Course Preparatory to Medicine)

First Semester

51. **PHARMACY.** General pharmaceutical processes. Lectures three times a week.

Second Semester

52. Continuation of Course 51, with Laboratory practice.

PHILOSOPHY

[UNIVERSITY HALL, Rooms 33, 50, 49 and 51]

Professor Scott, Mr. Wissler

First Semester

51. **PSYCHOLOGY. LOGIC BEGUN.** Four times a week. Required in the Courses for B. A., B. Ph. (L.), and B. Ph. (M. L.)

53. **PSYCHOLOGY.** Three times a week. Required in the Courses for B. Ph. (E.), B. Sc., for Law and Journalism, and for Medicine.

55. **ETHICS.** Three times a week. Required in Course for B. Ph. (E.)

57. **HISTORY OF ANCIENT AND MEDIÆVAL PHILOSOPHY.** Three times a week. Elective after Courses 51 and 52.

59. **INTRODUCTION TO PHILOSOPHY.** Twice a week. Elective after Courses 51, 52, 56 and 57 or after Courses 53, 54, 55 and 56.

61. **PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY.** Twice a week. Elective. This course begins with a general survey of the organic basis of personality, attention, etc., taking up in turn the sense organs and perception, motor processes and the personal equation.

63. **LEADING WORKS IN PHILOSOPHY.** Twice a week. Elective on the same conditions as Course 59.

Second Semester

52. **LOGIC COMPLETED AND ETHICS.** Four times a week. Follows Course 51.

54. **LOGIC.** Three times a week. Follows Course 53.

56. **HISTORY OF MODERN PHILOSOPHY.** Three times a week. Required after Course 55. Also elective after Courses 51 and 52.

60. **METAPHYSICS.** Twice a week. Elective after Courses 51, 52, 57 and 56 or after Courses 53, 54, 55 and 56.

62. **PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY.** Twice a week. Elective. The work of this semester presupposes Course 61. Individual topics will be assigned and the student will be required to report upon the general literature of the subject as well as to make an experimental study of some of the controverted points.

64. **LEADING WORKS IN PHILOSOPHY.** Twice a week. Elective on the same conditions as Course 60.

PHYSICS

[UNIVERSITY HALL, Rooms 10, 14, 23 and 24]

Professor Thomas, Assistant Professor Boyd, Mr. Kester

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **ELEMENTARY PHYSICS.** Recitations and experimental lectures. Five times a week. First and Second Terms. Text: Carhart & Chutes' "Elements of Physics." (Required in all Short Courses.)

2. **MECHANICS AND HEAT.** Electricity and Magnetism, Sound and Light. Lectures and recitations. Three times a week. Through the year.

3. **PHYSICS.** Extension of Course 2, with practice in solution of problems. Twice a week. Through the year.

4. **ELECTRICITY AND MAGNETISM.** Lectures and recitations. Three times a week. First term. (Third year, Electrical Engineering.)

5. **PHYSICAL LABORATORY.** Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and heat. Three times a week Second and third terms.

6. **PHYSICAL LABORATORY.** Theory and practice of magnetic and electrical measurement, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields, magnetic moments, permeability; work in light including optical constants; spectroscopy; photometry of gas, electric and other lights. Five times a week. First, second and third terms. (Third year, Electrical Engineering.)

7. **PHYSICAL LABORATORY.** Two to three times a week. Through the year. Course 7 must be preceded by Course 2.

9. **PHYSICAL LABORATORY.** A second year's work in the Physical Laboratory. Three times a week, with five hours' credit. Course 9 must be preceded by Course 7.

The work in the Physical Laboratory begins with exercises in length, mass and time measurement, making use of scales, tapes and bars, micrometer screws, micrometer microscopes, the dividing engine, the cathetometer, the balance, chronometers, chronoscopes, etc. This course is intended to give the student facility in the use of instruments and knowledge of the theory of their construction and adjustment.

The determination of various physical constants follows, with elementary exercises in heat, light, electricity and magnetism; after which the student takes up such advanced work as his taste and skill permit. The experimental work is accompanied by instruction in methods and in the discussion of results.

11. **MECHANICS, SOUND AND HEAT.** One lecture, two laboratory periods a week. Required in the Course in Pharmacy.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **MECHANICS, HEAT, ETC.** Three times a week. Second year, Science Course. Elective in the First year of the Courses of Arts and Philosophy.

53. **MECHANICS, SOUND AND HEAT.** One lecture, two laboratory periods a week. Elective in the First year of the Courses of Arts and Philosophy. Required in the First year of the Course Preparatory to the Study of Medicine.

55. **LABORATORY.** Three to five times a week.

57. **LABORATORY.** Three to five times a week. Course 57 must be preceded by Course 55.

Second Semester

52. **ELECTRICITY, MAGNETISM, ETC.** Three times a week. Follows Course 51.

54. **ELECTRICITY, MAGNETISM, ETC.** One lecture, two laboratory periods a week. Follows Course 53.

56. **LABORATORY.** Continuation of Course 55.

58. **LABORATORY.** Continuation of Course 57.

60. **LABORATORY.** Two hours a week. First year of Course Preparatory to the Study of Medicine.

PHYSIOLOGY

(*See* Anatomy and Physiology)

POLITICAL ECONOMY

(*See* Economics)

POLITICAL SCIENCE

[UNIVERSITY HALL, Room 27]

Professor Knight

First Semester

51. **INTERNATIONAL LAW.** Lectures and text-book. A study of public international law and of the important modern treaties. Lawrence's *Principles of International Law.* Twice a week. Open only to those who have had Courses 51, 52 and 55 (or 56) in History.

53. **POLITICAL INSTITUTIONS OF THE UNITED STATES.** Lectures and recitations. A study of the origin and nature of the political institutions of the United States, and an analysis of the form and powers of the government. Bryce's *American Commonwealth;* Burgess's *Political Science.* Three times a week. Open only to students who have had History 55 or 56.

55. **THE GOVERNMENT OF DEPENDENCIES.** A study of the political institutions of the leading colonial governments. Lectures, collateral readings and special reports. Twice a week.
Given biennially. Not offered in 1899-1900.

Second Semester

52. **MUNICIPAL GOVERNMENT.** Lectures and collateral reading. A study of the development and status of modern municipalities, and a comparative study of recent American municipal charters. Twice a week.

51. **COMPARATIVE POLITICAL INSTITUTIONS OF EUROPE AND AMERICA.** Lectures, recitations and collateral readings. A comparative study of the political institutions and governmental forms and powers in the United States, England, Germany, France and Switzerland. Burgess's *Political Science and Constitutional Law.* Three times a week. Course 54 must be preceded by Course 53.

56. **HISTORY OF TREATIES AND MODERN DIPLOMACY.** Lectures on important treaties of modern times with special reference to their bearing upon international law. Accompanied by collateral reading and special reports. Twice a week. This course must be preceded by Course 51.

RHETORIC AND ENGLISH LANGUAGE

[UNIVERSITY HALL, Rooms 42, 40 and 38]

Professor Denney, Assistant Professor Graves, Assistant Professor Shurter, Assistant Professor McKnight, Mr. Parker

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ENGLISH COMPOSITION — WRITTEN AND ORAL.** *Three times a week.* Credit two and one-half hours. The course includes (a) two exercises weekly in the writing of short themes, the outlining and composition of essays and speeches, and the study of illustrative texts for structure and form, in connection with Scott and Denney's Paragraph Writing; (b) one practice hour weekly in oral composition, including exercises and drill in the essentials of good speaking and the delivery of at least one original speech and one essay by each member of the class. The practice hour is in charge of the instructor in Public Speaking.
Required in all courses.

53. **ANALYSIS OF ENGLISH PROSE.** *Four times a week.* The course includes (a) two recitations weekly in the analysis of specimens of prose literature, selected to illustrate rhetorical principles — text.books, Genung's Rhetorical Analysis and Lewes' Principles of Success in Literature; (b) one lecture weekly on the Principles of Style with prescribed readings and reports; (c) one exercise weekly in composition-practice, mainly in types of exposition. Course 53 must be preceded by 52.
Required in the Modern Language and English Courses in Philosophy, and the Course in Commerce and Administration.

55. **RAPID WRITING.** *Once a week.* The preparation of articles for the Press with practical exercises in observation, reporting, abstracting, condensation and expansion, proof reading, and a study of newspaper forms.
Required in the Course Preparatory to Law and to Journalism. Elective to students who have passed Course 53 or 54.

57. **BRIEF-MAKING AND ARGUMENTATION.** *Three times a week.* The course includes (a) the study of the principles of logical analysis, evidence, argumentation, persuasion and debating; practice in writing briefs of noted American and British speeches; the preparation of original briefs preliminary to a series of formal debates extending through the remainder of the course, one debate each week, by sections of the class, in rotation; (b) the instructor

in Public Speaking will meet the class one hour of the three each week, in the early part of the course, for general exercises and drill preparatory to debate, and after the debates begin, for conference and criticism and further drill. This course should be preceded or accompanied by Course 53 or 54.

59. **POETICS.** *Twice a week.* Gummere's Hand-book of Poetics for reference. Prescribed readings and reports, with exercises in verse-writing to illustrate the meters of English verse. This course must be preceded by Course 53 or 54.

61. **RHETORICAL THEORY.** *Two hours a week.* Special investigations, reports and discussions. An introduction to methods of research and use of material. Exclusively for undergraduates making their graduation theses in this department and for graduate students working in either of the English Departments.

63. **ADVANCED RHETORIC.** *Twice a week.* The subject matter of this course is the same as that of Course 3 described below. Course 63 is required of students in the Course Preparatory to Medicine, and is open to no others, except by special permission.

65. **THE STUDY OF A NOVEL FOR ITS DRAMATIC ELEMENTS** under the direction of the Professor of English Literature, followed by its recasting in the form of a play under the direction of the Professor of Rhetoric, and its presentation by the class under the direction of the instructor in Public Speaking. *Once a week.* Special permission necessary.

67. **TEACHERS' COURSE IN RHETORIC.** *Two hours a week.* Lectures, conferences and prescribed readings on the teaching of composition and rhetoric in the schools; class-room procedure; the place of the text-book; plans for courses and for lessons; the teacher's equipment; the essay problem; a review of the work of the English Conferences and of recent text-books; the relations between composition-teaching and the teaching of English Classics; the order of topics; the function of criticism. Course 67 should be preceded by Course 53 or 54, but this requirement is waived for those who are engaged in teaching.

69. **HISTORY OF THE ENGLISH LANGUAGE.** *Twice a week.* An elementary course complete in itself, but also introductory to courses in Old and Middle English. Lectures and text-book (Emerson's Briefer History) with illustrative readings.

Required in the English Course in Philosophy. Elective to all other students in Arts and Philosophy Courses.

71. **OLD ENGLISH PROSE.** *Twice a week.* A reading course. Course 71 must be preceded or accompanied by Courses 69 and 70.

Required in the English Course in Philosophy. Elective to all others who have passed or are taking Courses 69 and 70.

73. **OLD AND MIDDLE ENGLISH PHILOLOGY.** *Two hours a week.* Must be preceded by Courses 69 and 70.

75. **PUBLIC SPEAKING.** *Two hours a week.* Exercises based upon assigned topics, which the student has mastered, in the fields of history, politics, education, and current events. Speaking from topical outlines and extempore speaking. Course 75 must be preceded by Course 53 or 54.

Second Semester

52. **ENGLISH COMPOSITION—WRITTEN AND ORAL.**, *Three times a week.* Credit two and one-half hours. Continuation of Course 51. Text-book; Cairns' The Forms of Discourse.
Required in all courses.

54. **ANALYSIS OF ENGLISH PROSE.** *Four times a week.* Repetition of Course 53.
Required in the Course in Arts, the Latin Course in Philosophy, the Course Preparatory to Law and to Journalism, and the Course in General Science.

56. **RAPID WRITING.** *Once a week.* Continuation of Course 55 and must be preceded by Course 55.
Required in the Course Preparatory to Law and to Journalism. Elective to others who have passed Course 53 or 54, and 55.

58. **BRIEF-MAKING AND ARGUMENTATION.** *Three times a week.* Continuation of Course 57 and must be preceded by Course 57.

60. **SHORT STORIES.** *Twice a week.* Lectures and practice. Structure and plot analysis of selected narratives; study of plan, purpose, diction and the uses of description; practice in writing short stories; with individual and class criticism. Course 60 must be preceded by Course 53 or 54.

62. **PROBLEMS IN CRITICISM.** *Two hours a week.* Special investigations, reports and a thesis. Course 62 must be preceded by Course 61.

64. **ADVANCED RHETORIC.** *Twice a week.* A continuation of Course 63 and must be preceded by Course 63.

66. **THE STUDY OF A NOVEL FOR ITS DRAMATIC ELEMENTS,** under the direction of the Professor of English Literature, followed by its recasting in the form of a play under the direction of the Professor of Rhetoric, and its presentation by the class under the direction of the instructor in Public Speaking. *Once a week.* Continuation of Course 65 and must be preceded by Course 65.

68. **TEACHERS' COURSE IN ENGLISH LANGUAGE AND ENGLISH GRAMMAR.** *Two hours a week.* Lectures, conferences and prescribed readings on the teaching of English in the schools. Course 68 should be preceded by Course 53 or 54, but this requirement is waived for those engaged in teaching.

70. **DEVELOPMENT OF ENGLISH PROSE.** *Twice a week.* An elementary course complete in itself, but also introductory to courses in Old and Middle English. Course 70 furnishes a rapid survey of the history of idiom and of the practical resources of the language, for students whose courses do not require the thorough study of Old and Middle English. Lectures and Illustrative Readings.
Required in the English Course in Philosophy. Elective to all other students in Arts and Philosophy Courses.

72. **OLD ENGLISH PROSE AND POETRY.** Continuation of 71 and must be preceded by 71. *Twice a week.*
Required in the English Course in Philosophy. Elective to all others who have passed 69 and 70.

74. **OLD AND MIDDLE ENGLISH PHILOLOGY.** Continuation of 73 and must be preceded by 73. *Two hours a week.*

76. **PUBLIC SPEAKING.** Continuation of Course 75 and must be preceded by Course 75. *Two hours a week.*

COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING AND PHARMACY

5. **ENGLISH COMPOSITION—WRITTEN AND ORAL.** Three terms. *Three times a week.* Credit two and one-half hours. For a description of Course 5 see Courses 51 and 52 above.

Required in all four-year and three-year courses.

3. **ADVANCED RHETORIC.** Three terms. *Twice a week.* The course includes (a) *once a week*, prescribed readings in the literature of technology and science; and the analysis of specimens of this literature, selected to illustrate rhetorical principles; (b) *once a week*, reports, abstracts, memoranda, and notes of lectures and of articles in the technical journals; practice in drawing specifications and writing brief papers on technical and scientific subjects.

Required in all four-year courses in the College of Engineering.

4. **ADVANCED COMPOSITION.** Three terms. *Twice a week.* Course 4 is intended for students desiring further practice in composition. Course 4 will not be given unless chosen by ten or more students. Voluntary in the courses in Civil, Mine, Mechanical and Electrical Engineering. Elective in the course in Industrial Arts, Chemistry, Pharmacy, Agriculture, Horticulture, Forestry, and Domestic Economy.

ROMANCE LANGUAGES

[UNIVERSITY HALL, Rooms 35 and 34]

I. FRENCH

Professor Bowen, Assistant Professor Bruce

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ELEMENTARY FRENCH.** Four times a week. Grammar: Edgren's (Part I) or Joynes' Minimum, with written exercises. Reader: Super's (from Part II) or Whitney's (Parts I and II). In this course the study of the language is taken up from the beginning. Stress is laid at first upon the acquisition of a correct pronunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end.

53. **SCIENCE READING.** Twice a week. A course introductory to the vocabulary of scientific literature, designed to familiarize the student with technical terms and style. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

55. **MODERN FRENCH LITERATURE.** Four times a week. Contes and Novels: Fontaine's Historiettes Modernes, Tome II. Balzac, Eugénie Grandet. Prose composition: Edgren's French Grammar [Syntax]. Lectures supplement the work; private reading required; systematic attention given to syntax and idiom. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

57. **FRENCH COMEDY.** Three times a week. Study of the growth of French Comedy, with work centering upon Molière [four plays], Regnard [Le Joueur] and Beaumarchais [Le Barbier de Séville]. Lectures and collateral reading. Open to those who have completed Courses 55 and 56.

59. **ADVANCED PROSE COMPOSITION.** Once a week. Practice in speaking and writing French. Intended for advanced students who desire special training on the practical side of the language. Open to those who have completed Courses 55 and 56.

61. **FRENCH TRAGEDY.** Three times a week. Racine and Voltaire. Lectures and readings, with assigned topics, reports and discussions. Must be preceded or accompanied by Course 57.

63. **FRENCH LITERATURE BEFORE THE SEVENTEENTH CENTURY.** Three times a week. Advanced work as in Course 61. Special study of la Chanson de Roland. Must be preceded or accompanied by Course 57. [Not offered in 1900-1901.]

Second Semester

52. **MODERN PROSE AND PLAYS.** Continuation of Course 51. Four times a week. Historical and narrative prose; one or more prose comedies. Sight reading is emphasized.

54. **SCIENCE READING.** Continuation of Course 53. Twice a week.

56. **MODERN FRENCH LITERATURE.** Continuation of Course 55. Four times a week. Lyric Poetry: Bowen's Modern French Lyrics. Drama: Comparative study of the classical and the romantic drama: Corneille, Horace; Hugo, Hernani.

58. **RECENT FRENCH WRITERS.** Three times a week. Bourget, Daudet, Rostand (Cyrano de Bergerac), Zola, and others. Open to those who have completed Courses 55 and 56.

60. **ADVANCED PROSE COMPOSITION.** Continuation of Course 59. Once a week.

62. **CHEAUTEAUBRIAND AND THE PRECURSORS OF THE ROMANTIC MOVEMENT.** Three times a week. Lectures and readings, with assigned topics, reports and discussions. Must be preceded by Course 57. Toward the close of the year lectures will be given on: Methods of teaching French and the teacher's equipment.

64. **THE DEVELOPMENT OF THE FRENCH NOVEL.** Three times a week. Advanced work, as in Course 62. Must be preceded by Course 57. [Not offered in 1900-1901.]

COLLEGES OF AGRICULTURE AND ENGINEERING

1. **ELEMENTARY FRENCH.** Four times a week throughout the year. Grammar and reader, modern prose and plays, as in Courses 51 and 52.

2. **MODERN FRENCH LITERATURE.** Four times a week throughout the year. The work is the same as in Courses 55 and 56. Open to those who have completed Course 1.

3. **SCIENCE READING.** Twice a week throughout the year. The work is the same as in Courses 53 and 54. Open to those who have completed Course 1 (or an equivalent).

II. ITALIAN

Professor Bowen

51. **GRAMMAR AND READINGS.** Two hours a week. First Semester. Grandgent's Italian Grammar and Bowen's First Italian Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French.

2. **GOLDONI AND DANTE.** Continuation of Course 51. Two hours a week. Second Semester.

III. SPANISH

Professor Bowen

51. **GRAMMAR AND READINGS.** Twice a week. First Semester. Edgren's Spanish Grammar and Matzke's First Spanish Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French. [Given in alternate years; will not be offered in 1900-1901.]

52. **CALDERON AND CERVANTES.** Continuation of Course 51. Twice a week. Second Semester.

SANSKRIT

(*See* Germanic Languages)

SHOPWORK

(*See* Industrial Arts)

SOCIOLOGY

(*See* Economics and Sociology)

VETERINARY MEDICINE

[VETERINARY HOSPITAL AND TOWNSHEND HALL]

Dr. White, Dr. Lavery, Dr. Fredericks, Mr. Brumley

COLLEGES OF AGRICULTURE AND VETERINARY MEDICINE

11. **OSTEOLOGY.** Lectures illustrated with skeletons and anatomical preparations. Dissections. Five times a week. First term.

12. **MYOLOGY.** Splanchnology and Angiology. Practical dissections and demonstrations on cadavers. Five times a week. Second term.

13. **LECTURES ILLUSTRATED IN THE DISSECTING ROOM AND ON ANATOMICAL MODELS.** Five times a week. Third term. Books of reference and recommended for study: Chauvau's *Comparative Anatomy* (Fleming's translation); Strangeway's; McFaydean; Mueller and Leisering.

14. **LECTURES AND GENERAL PATHOLOGY.** Five times a week. First term.

15. **SPECIAL PATHOLOGY AND THERAPEUTICS OF SPORADIC DISEASES.** Non-infectious Internal Diseases. Five times a week. Second term.

16. **SPECIAL PATHOLOGY AND THERAPEUTICS OF NON-INFECTIOUS DISEASES OF THE HORSE, OX AND DOG.** Five times a week. Third term.

17. **DISEASES OF THE COW.** Three hours a week. Second term.

18. **SURGICAL DISEASES AND OPERATIONS.** Lectures; illustrated by practical demonstrations by drawings, on living animals in the clinic, and on cadavers in the dissecting-room. Five times a week. First, second and third terms. Books recommended: As text-book, Mueller's *Operative Veterinary Surgery* (Dollar's translation). Liantard's *Manual of Operative Veterinary Surgery*, Beyer.

19. **HORSE, CATTLE AND DOG CLINIC IN THE VETERINARY HOSPITAL.** Stationary and Ambulatory. The clinics are held at 10-11 A. M. (standard) and are free. Animals left in the Hospital are treated by the students of the junior and senior year, under the superintendence of the clinical professor.

20. **SPECIAL PATHOLOGY AND THERAPEUTICS OF INFECTIOUS AND CONTAGIOUS DISEASES.** Five times a week. First term.

21. **SPECIAL PATHOLOGY AND THERAPEUTICS OF INFECTIOUS AND CONTAGIOUS DISEASES.** Three times a week. Second term. Texts: Froehner-Freidberger, Williams, Robertson.

22. **GENERAL THERAPEUTICS.** Lectures. Texts: Ellenberger and Hoffmeister. Five times a week. Third term.

23. **OBSTETRICS.** Lectures and demonstrations. Anatomy and pelvic organs. Diseases before and after parturition. Obstetrical operations and manipulations. Books: Fleming's Franck's *Obstetrics*. Three times a week. First, second and third terms.

24. **GENERAL SURGERY.** Practical work, such as the more common operations which a regular practitioner would be called upon to perform. All this work is done by the student upon chloroformed live animals purchased for the purpose. Five times a week. First term.

25. **ANATOMICAL LABORATORY.** Practical work in Topographical Anatomy, as a review of Anatomy for senior students. Books: McFadyean, Schmaltz's plates.

26. **PRINCIPLES OF HORSE-SHOEING.** Lectures and demonstrations. Includes all the diseases of the foot due to bad paring, shoeing, etc. Books: Leisering, Fleming.

27. **MEAT INSPECTION.** Lectures on Inspection of Meat and Milk. Five times a week. Books: Walley, Ostertag.

28. **ANATOMY.** Five times a week. First term.

29. **GENERAL PATHOLOGY.** Five times a week. Second term.

30. **SPECIAL PATHOLOGY AND THERAPEUTICS OF INFECTIOUS AND CONTAGIOUS DISEASES.** Five times a week. Third term.

31. **CANINE DISEASES.** Three times a week. First term.

32. Continuation of Course 31.

33. **OPHTHALMOLOGY.** Twice a week. Third term.

ZOOLOGY AND ENTOMOLOGY

[BIOLOGICAL HALL, Rooms 3, 4, 7, 8 and 9]

Professor Osborn, Assistant Professor Hine, Mr. Landacre

COLLEGE OF AGRICULTURE

1. **INVERTEBRATE AND VERTEBRATE.** Three times a week. Invertebrate, first and second term; Vertebrate, third term. This course includes a general discussion of groups, dissection of types and an outline of classification.

3. **ECONOMIC ENTOMOLOGY.** Insects of Forest, Orchard and Garden. Five times a week. Third term.

4. **ECONOMIC ENTOMOLOGY.** Twice a week, through the year. This course must be preceded by Course I.

7. **SYSTEMATIC AND PRACTICAL ENTOMOLOGY.** Two lectures and one laboratory period a week. Third term.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **COMPARATIVE ZOOLOGY.** Two lectures and one laboratory period a week. This course includes studies of types of different groups, discussion of principles and an outline of classification.

53. **COMPARATIVE ANATOMY OF VERTEBRATES.** A laboratory course. Three laboratory periods a week, devoted to Osteology, Myology, Neurology and a full study of certain type forms.

55. **COMPARATIVE ANATOMY OF VERTEBRATES.** A laboratory course. Five laboratory periods a week. Similar to 51, but more extended.

57. **ZOOLOGY AND ANATOMY.** Advanced laboratory. Three laboratory periods a week.

59. **ZOOLOGY AND ANATOMY.** Advanced laboratory. Five times a week.

61. **ENTOMOLOGY.** An advanced Practical Course. Five laboratory periods a week. This course must be preceded by Courses 51 and 52, or 1, or 4, or 7 in the College of Agriculture.

65. **ORNITHOLOGY.** Two laboratory periods a week. Open to those who have had Zoology 51, or its equivalent.

Second Semester

52. Continuation of Course 51. Lectures twice a week. One laboratory period.

54. Continuation of Course 53. Three laboratory periods a week.

56. Continuation of Course 55. Five laboratory periods a week.

58. Continuation of Course 57. Three laboratory periods a week.

60. Continuation of Course 59. Five laboratory periods a week.

62. Continuation of Course 61. Five laboratory periods a week.

64. **COMPARATIVE ZOOLOGY.** Three lectures and one laboratory period a week.

66. Continuation of Course 65.

Courses 57, 58, 59, 60, 61, 62, must be preceded by Course 1 in the College of Agriculture, or Courses 51, 52, or 53, 54, or 64; or an equivalent taken elsewhere. The student may choose his work from any of the following:

(a) The Exhaustive Anatomy and Histology of the Frog.

(b) Comparative Anatomy of Invertebrates.

(c) Invertebrate Embryology.

(d) Vertebrate Embryology.

(e) Comparative Neurology.

(f) Cellular Biology.

A student whose major lies in Zoology may take two full years' work, selected from subjects named in the foregoing list.

ENROLLMENT

1898-1899

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

GRADUATE STUDENTS — 6

	Home Address
Derby, Florence, B. Ph.	Columbus
Flickinger, George A., B. Sc. (Agr.)	York
McLaughlin, Annis, B. Ph.	Columbus
Rice, Mabel Elise, B. Ph.	Columbus
Ruhlen, Frank, B. Sc. (Agr.)	Columbus
Sheldon, Helen Griswold, A. B. (Vassar College)	Shepard

UNDERGRADUATES — 158

	Course	Course Hours	Credit Hours	Home Address
Abbott, Arthur Grant, B. Sc. (Agr.)		...		Medina
Abbott, Carl B	Agr.	206	92½	Medina
Allen, Glen Lloyd	Agr. S.	98	13	Washington C.H.
Anderson, Joseph Buchanan	Agr. S.	98	101+8	Jewett
Andress, Henry	Agr. S.	98	15	Birmingham
Armstrong, Clara	Dom. Sci.	203	101	Columbus
Atherton, William Thomas	Agr. S.	98	51+2	Carrollton
*Beale, Harry Glenn	Agr.	206	48	Mt. Sterling
*Beattie, Lena Leota	Dom. Sci.	203	91	Zanesville
Beattie, James Herbert	Agr. S.	98	39½	Zanesville
Beattie, Rosalie Mae	Dom.Sci.S.	90	18	Zanesville
Belden, Herbert Lucius	Agr.	204	93	Middlefield
Betts, Adelbert Hayes	Dairy	...	...	Kinsman
Blachley, Helen	†	...	...	Columbus
Boggs, Howard Shannon	Agr. S.	98	49½	Kingston
*Bratton, Alice May	Dom. Sci.	203	95	Columbus
Breckenridge, William Kemper	Agr. S.	98	48+5	Watertown
Brinker, Thomas William	Agr. S.	98	110+4	Chatham
*Bundy, Lyman Edmund	H. & F.	203	29	Coleraîn
Byers, William Gerald	Agr. S.	98	38	Lilly Chapel
Candy, Ella Belle	†	...	12	Columbus
Carl, Harry W	Agr. S.	98	25	Spanket
*Church, James Scott	Agr.	206	21½	Palmyra
*Clark, Herman Alfred	H. & F.	206	41	Medina
Clawson, Lucy Blanch	Dom.Sci.S.	90	45	Okeana
Clawson, Clarence, B. Sc. (Agr.)		...	...	Okeana
*Clevenger, Charles Henry	Agr.	206	73	Fletcher
Coates, Elsie Mae	Dom.Sci.S.	90	28	Columbus
Comstock, Allen L.	Dairy	...	...	West Richfield
Cotton, Edwin Charles	Agr. S.	98	94+15	Elyria
Crabb, James Byel	Agr. S.	98	42	Mt. Sterling
Crawford, Mary B.	Dom. Sci.	203	144	Blaine
Dallas, John Thomas	Agr.	204	145	Pine Valley

* Preparatory work incomplete.
† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
, Vernon Hayes	Agr.	204	175	Byesville
s, Ella Augusta	Dom.Sci.S.	90	45	Constantia
Albert Edward	Agr.	206	48½	Mt. Carmel
rest, Herbert Russell	Agr.	206	76	Columbus
gton, Wilbur Stanley	Dairy	...	...	Deckard, Pa.
on, Eva Nichalson	Dom. Sci.	203	64	Columbus
Boyton	Agr. S.	98	36½	Pickerington
sbach, Mary	Dom. Sci.	203	93	Columbus
, Ray H	Dairy	...	...	North Eaton
, Ernest Henry	Dairy	...	...	Parkman
scar, B. Sc. (Agr.)		...	...	Monroeville
, Solomon Johnson	Dairy	...	...	Nelson
Thomas Kirkwood	Agr. S.	98	66+4	Keene
ay, Annetta Jane	Dom. Sci.	203	51	Keene
, Elmer Otterbein	Agr.	204	187	Galloway
r, Margaret Willmina	Dom.Sci.S.	90	16	Columbus
Rollin	Dairy	...	...	Elyria
ter, Emma Warwick	Dom.Sci.S.	90	45	Higbys
ter, John Cook, Jr	Agr. S.	98	35+1½	Columbus
, Samuel Hamlin	Agr. S.	98	...	Nashport
ouse, David William	Agr.	204	126	Doylestown
, Herbert R	Dairy	...	...	Camp Chase
e, Walter Hayes	Agr. S.	98	70+23	Millersport
e, William Henry, B. Sc. (Agr.)		...	...	Millersport
g, Maynard Marcus	Agr. S.	98	123	Windsor
lee, James Ross	Agr.	206	35	Bridgeport
h, Winford Irving	Agr.	206	...	Constantia
ton, Frank Edward	Agr.	206	44	Brownsville
on, Henry Hoge	Dairy	...	...	Brownsville
Jesse M	Agr. S.	98	36	Olentangy
George U., Jr	†	...	2	Columbus
r, Merritt	Agr.	204	104	Grove City
n, Cassius Clay	Agr.	204	144	Oakdale
Harry Rogers	Dairy	...	...	Ft. Wayne, Ind.
y, Benjamin Westheffer	Agr. S.	98	22	Easton
, Flora Louise	Dom.Sci.S.	90	50	North Columbus
, Mamie Faye	Dom. Sci.	203	57	Columbus
way, Carrie	Dom.Sci.S.	90	27	Columbus
, Ernest	Dairy	...	...	Wooster
, Louis Curtiss	Agr. S.	98	15	Ira
Marion, B. Sc. (Agr.)		...	...	Bashan
, Woodford Elias	Agr. S.	98	16	Chillicothe
James	Agr. S.	98	55	Richmond
, Walter Charles	Dairy	...	...	Andes, N. Y.
s, Otto Emery	Agr.	206	50	Olena
n, Fred Symes, B. Sc (Agr.)		...	...	Ashtabula
J. Lewis	Agr. S.	98	54	Penfield
Lloyd	Agr. S.	98	52½	Columbus
, Galena May Belle	†	...	34	Columbus
William Lester	Agr. S.	98	79+13	Newark
, Mary	Dom.Sci.S.	98	...	Cleveland

paratory work incomplete.
cial — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
King, John Clarence	Agr. S.	98	...	Fremont
Kirk, Edward Cassius	Agr.	206	39	Ashland
Klein, Henry Stephen	Agr. S.	98	...	Ironton
*Kolbe, Lawrence Albert	Agr.	204	95½	North Amherst
Ladrach, Lewis Frederick	Dairy	...	...	Rogersville
*Liles, Frederick William	Agr.	206	50	Collins
Long, Frank Clark	Agr. S.	98	50+12	West Sonora
Long, Frederick Pontius	Agr. S.	98	78+5	Kingston
Marion, Walter Jerid	Agr. S.	98	62+3	Amanda
Marshall, Ida	Dom. Sci.	203	39	Hemlock
Mason, Arthur Devillo	Agr.	204	93	Wellington
*Mayers, Mayme Louise	Dom. Sci.	203	5	Columbus
Meek, Eunice	Dom.Sci.S.	90	40	Afton
Meiche, Louis	Agr. S.	98	53	North Royalton
Mergler, Jacob Cornelius	Agr. S.	98	58	Mt. Washington
Metcalf, Walter Charles	Agr. S.	98	40+9	Temple
Miller, Henry Alexander	Agr. S.	98	8	Gypsum
Miller, Merritt Finley	Agr.	204	179	Ridpath
Miner, Charles Austin	Agr. S.	98	53+5	Bristolville
Montgomery, Frank	†	...	2	Columbus
Mooney, Charles Napoleon	Agr.	204	166	Milan
Mull, Ernest Clinton	Agr. S.	98	23+5	Lebanon
*Murray, Edna Earl	Dom. Sci.	203	94	Columbus
Murray, John B	Dairy	...	...	Penfield
McCall, Arthur Gillet	Agr.	204	153	McGaw
McClellan, John Arthur	Agr. S.	98	79+8	Cable
McClure, William W	Agr. S.	98	28½	Union City, In
McKay, Welden Nickerson	†	...	47	New Burlington
*McLaughlin, Harrold	H. & F.	206	16	Columbus
McMahon, Mary Gertrude	Dom.Sci.S.	90	30	Columbus
*McOwen, James, Jr	H. & F.	204	120	Ovid
McOwen, Thomas	Agr. S.	98	40+21	Ovid
*Neill, Nelson Prentice	Agr.	204	89	Venice
Nettleton, Edward	Agr. S.	98	59+15	Medina
Newton, Sheldon Watrous	†	...	77	Boardman
Osborn, Alice	Dom. Sci.	203	51	Cadiz
Palmer, Roland Jay	Agr. S.	98	92+1	Penfield
Perry, Elma Brooks	Dom. S.	203	119	Troy
*Perry, John Cole	Agr.	204	120	Columbia Sta.
Phillips, John Howard	Agr. S.	98	...	Centerburg
Pierce, Benjamin Manly	Agr. S.	98	74+41	Ringgold
Postle, Carlton David	Agr. S.	98	30+4	Alton
*Postle, Florence	Dom. Sci.	203	48	Camp Chase
*Postle, Stuart A	Agr.	204	86	Camp Chase
Reno, Mell Lewis	Dairy	...	...	Clark
*Reppert, Alda Cora	Dom. Sci.	203	23	Columbus
Rexroth, Roy Abraham	Agr. S.	98	16	Bucyrus
Ridinger, John Gilbert	Agr. S.	98	100	Kalida
*Riley, Valeria	Dom. Sci.	203	92	Washington C.H.
*Robert, John Livingston	Agr.	204	113	Vaughnsville
Ruhlen, La Mott	Agr. S.	98	62+19	Plain City

* Preparatory work incomplete.

† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
Sayre, Eliza Morgan	†	...	3	Columbus
*Schaeffer, Freelan Wilbert	Agr.	204	124	Spanker
Senter, Pearl	†	...	12	Shepard
Shaw, Edward Lee	Agr.	206	49	Newark
Shippee, Henry George	Dairy	...	...	Spraguev'le,N.Y.
*Sigrist, John Larkun	Agr.	204	55½	Congress
Skiles, Blanche Gertrude	Dom. Sci.	203	73½	Shelby
Smith, Leon D	Dairy	...	...	Mantua
*Snyder, Addison Hogan	Agr.	204	101	Tacoma
*Solether, Charles Franklin	Agr.	206	19	Jerry City
*Steward, Charles Benjamin	Agr.	204	167	Marcy
Taylor, Frederic Wellington	Agr.	204	155	Wooster
*Thompson, Benjamin Sells	Agr.	206	11	Wallsburg
Thompson, Edith Leontine	Dom.Sci.S.	90	10	Huron
Trowbridge, Warner Wesley	Agr. S.	98	53	Painesville
*Tyler, Fred J	H. & F.	204	159	Perry
*Uncapher, Jesse Darius	Agr. S.	98	55	Marion
Vandament, Orin Lee	Agr. S.	98	10	Hamersville
Vickery, John Bateman	Dairy	...	...	Rosscarberry, Ir.
Ward, Harry William	Agr. S.	98	48	Columbus
Warden, Leonard C., B. Sc. (H. & F.)		...	...	Avon
Weisman, Laura Anna	Dom. Sci.	197	142	Columbus
Whitman, Charles Henry	Dairy	...	...	Doylestown

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

GRADUATE STUDENTS--27

	Home Address
Allen, Lucy, B. A.	Columbus
Ball, Emma Leanna, M. Sc	Ironton
Benson, Clarissa W., B. A.	Gambier
Blakiston, Mary, B. Ph	Columbus
Boyd, Emma, B. Ph	Columbus
Brown, Frank, A. B. (Macalester College)	Columbus
Claypoole, Charlotte Lake, B. Ph	Columbus
Clements, Frank Orville, M. A. (Otterbein University)	Westerville
Detmers, Freda, M. Sc	Columbus
Dresbach, Melvin, B Sc	Kingston
Flynn, Oscar R. B. Sc	Columbus
Frankham, Charles R. (Otterbein University)	Westerville
Fullmer, Edward Lawrence, B. Sc	Defiance
Hendricks Benjamin Murphy, A. B. (Denison University)	Newark
Hirst, Anna Brewster (Antioch College)	Yellow Springs
Jeffrey, Maud Dorothy, B. Ph	Columbus
Kersey, William Rufus, B. A. (Earlham College)	Columbus
Kirby, Harriet Rebecca, B. A.	Columbus
Kohr, Donald Alexis, B. Ph	Westerville

* Preparatory work incomplete.
† Special — not a candidate for a degree.

	Home Address
Maag, Benjamin (Wooster University)	Mt. Eaton
Meek, Edward D., B. A.	Glencoe
Milne, Alexander M. A. (B. D., Yale University)	Duluth, Minn.
Osborn, Raymond Carroll, B. Sc.	Columbus
Parker, John Bernard, B. A.	Danville
Rasor, Samuel Eugene, B. Sc.	Clayton
Scott, Daisy M., B. A.	Columbus
Williams, Herbert Oswald, B. A.	Columbus

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

UNDERGRADUATES—371

	Course	Course Hours	Credit Hours	Home Address
Abbott, Roy A.	E. Ph.	128	107	Columbus
*Adams, Elizabeth Jane	Arts	126	36	Columbus
*Adams, Margaret E.	Arts	126	23	Columbus
Allaman, Ranson Perry	†	...	10	Trotwood
Anderson, John Milton	†	...	65	Greenville
Andress, Edna Alice	M. L. Ph.	126	56	Birmingham
Armstrong, Lucy Ruth	†	...	5	Hayesville
*Ash, Ray Charles	Med.	100	20	Ashland
Baird, Burgess Clay	L. Ph.	126	62	Troy
Baldwin, Elizabeth Grant, B. Ph.		...	...	Columbus
Baldwin, Fredericka Hull	E. Ph.	128	48	Columbus
*Baldwin, Harry John	Journalism	98	33	Beverly
*Ball, Danforth Ewers	Science	129	74	Columbus
Barcus, Eliza	Arts	126	84	Columbus
*Bargar, Frederick Chase	Journalism	98	7	Columbus
Barnet, Clarence Elwood	†	...	80	New Paris
*Barrow, Ernest Manasseh	E. Ph.	128	34	New Vienna
*Barrows, Edward Morley	Journalism	98	21	Columbus
*Beatty, Carroll E.	E. Ph.	128	56	Columbus
Beck, Edwin Long	L. Ph.	126	54	Lithopolis
*Beekman, Minnie Rose	†	...	37	Columbus
*Beer, James Anderson	Med.	100	29+17	Ashland
Bell, Florence Louise	E. Ph.	128	102	Columbus
*Bellows, Gertrude Halm	E. Ph.	128	36	Columbus
Benson, Julia P.	†	...	3	Gambier
Biederwolf Charles Lewis	†	...	21	Columbus
Bigelow, Leslie L.	Arts	126	34	Columbus
Bittner, William Pitt	Journalism	98	32	Sandusky
Bock, Harry W., B. Ph.		...	...	Canton
*Booth, Cora Vrooman	L. Ph.	126	18	Columbus
Bostwick, Homer Z.	Arts	126	96	Columbus
Bostwick, Valeria	Arts	126	32	Columbus

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† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
*Bowles, John Porter	Journalism	98	32	Columbus
Brandt, James Herbert, B. A.		...	...	Greencastle
Braun, Bertha Elizabeth	L. Ph.	126	...	Columbus
*Brooks, Stanley Grange	Science	129	33	Columbus
Brown, Albert Marion	†	...	61	Wauseon
Brown, Jessie L. P.	Arts	126	24	Columbus
*Bruce, Horace V	M. L. Ph.	126	44	Eaton
Bryant, William Cheney	†	...	28	King's Creek
Burgess, James Henry	†	...	69+17	Big Horn, Wy.
*Burkey, Charles Paul	Journalism	98	27+2	Pleasantville
*Burris, Margaret May	M. L. Ph.	126	40	Columbus
*Butcher, Frederic Eric	E. Ph.	128	124	Buckland
Butler, Blanche Woodruff	Arts	126	63	Wellsville
Canfield, Dorothea Frances, B. Ph.		...	...	Columbus
*Cannon, Anna Cathrine	Journalism	98	64	Columbus
Carmack, Caroline Martha	Arts	126	9	Columbus
*Carothers, Wilson Roy	Science	129	11	Sidney
Carpenter, Jessie Marie	E. Ph.	128	28	Columbus
Carpenter, Hattie Harrison	†	...	14	Columbus
Carr Emma Perry	L. Ph.	126	32	Coshocton
*Carson Nellie Eliza	L. Ph.	126	53	Harrisburg
*Chamberlain Robert M.	Science	129	49	Columbus
*Chaney, James William	E. Ph.	128	27	Columbus
*Chase, M. Elizabeth	L. Ph.	126	29	Columbus
*Clagett, Arthur E.	Science	129	28	Dayton
Clapp, Katharine B.	†	...	34	Norwalk
Clum, Harry Ernest, B. Ph.		...	...	Thornville
Cockerill, Orville P.	†	...	34	Washington C.H.
Cockins, Rutherford Hayes	E. Ph.	128	96	Columbus
Colgan, Lillian Katharine	Arts	126	61	Columbus
*Collins, Walter Scott	Arts	126	72	Columbus
*Connolley Augusta	L. Ph.	126	32	Columbus
*Connor Alice Marie	E. Ph.	128	83	Columbus
Connor, Ellen Josephine	E. Ph.	128	96	Columbus
Converse, Walter, B. A.		...	...	Plain City
Corner, Edith	L. Ph.	126	52	Columbus
Cottom, Frank W.	Med.	100	33	Dayton
Coursalt Ida Mae B. Ph.		...	...	Columbus
Courtright, Elizabeth Pauline	Arts	126	76	Columbus
Courtright J. Loring	Arts	126	107	Circleville
Courtright Stella Van	L. Ph.	126	61	Columbus
Cummings Lawrence Belding	†	...	48	Columbus
*Cureton, Benjamin Fletcher	Arts	126	55	Columbus
*Davis, William Edgar	Arts	126	28	Columbus
Dean Wilbur Spencer	†	...	27	Warsaw
De Frees John Kessler	Arts	126	53	Troy
*De Nune, Ethel	Arts	126	26	Columbus
Derby Alice G.	L. Ph.	126	68	Columbus
*Determan. Hugo Philip	Journalism	98	58	Columbus
*Dever, Louisa	M. L. Ph.	126	71	Portsmouth
Dickinson, Thomas Herbert, B. Ph.		...	...	Columbus

* Preparatory work incomplete.
† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
Dickinson, George Codwice	Arts	126	70	Columbus
Dill, Augusta Dille	E. Ph.	128	111	Columbus
Dollison, Harvey Clinton	Med.	100	98+17	Zanesville
*Dolson, Benjamin Reimmund	E. Ph.	128	...	Lancaster
Donovan, Dennis Aloysius	E. Ph.	128	34	Columbus
Douth, Ida Helen	†	...	11	Athens
Dowd, Charles Fuller	M. L. Ph.	126	109	Toledo
*Dubois, Wilbur L	Science	129	38	Cincinnati
Dufour, Alice	E. Ph.	128	86	Columbus
*Durstine, Florence Sarles	Arts	126	74	Columbus
Eagleson, John Hervey	Arts	126	88	Columbus
Eagleson, Joseph Pentecost	Arts	126	87	Columbus
Easton, Ernest Doane	Science	129	77	Springboro
*Ebright, Bessie	E. Ph.	128	17	Columbus
Eisenbise, Bertha	E. Ph.	128	96	Columbus
*Elsey, Raymond Amos	M. L. Ph.	126	24	Plain City
*Enlow, Charles Bates	E. Ph.	128	100	Bridgeport
Euans, William Weldon	E. Ph.	128	61	Columbus
*Evans, Thomas Daniel	Journalism	98	50	Newark
Ewalt, Clara Converse	E. Ph.	128	70	Columbus
*Falkenbach, Lydia	E. Ph.	128	25	Columbus
*Fawcett, Charles Fearnley	Science	129	21	Salem
*Figley, Mary Myrtle	M. L. Ph.	126	26	Marysville
Fisher, Ida May	L. Ph.	126	94	Columbus
Flanagan, Curran E	†	...	30	Kenton
Fleming, Joseph Hamilton	Science	129	34	Olentangy
Foster, Asa Emmanuel	Arts	126	24	New Salem
Fox, Ross Garfield	E. Ph.	128	71	Columbus
*Fullerton, Rutherford	Journalism	98	8	Columbus
*Gagle, Lafayette Matthias	E. Ph.	128	15	New Bremen
Gale, Irene	†	...	12	Columbus
*Game, Francis Harvey	E. Ph.	128	26	Can. Winchest
Games, Benjamin Herschel	†	...	4	Richwood
Gamper, Hattie	M. L. Ph.	126	88	Columbus
*Gardner, Frank I	Science	129	10	Worthington
Gauch, James Arlando	Arts	126	32	W. Manchester
Gayman, Charles Welton	E. Ph.	128	90	Can. Wincheste
Geren, Helen Onata	E. Ph.	128	85	Columbus
*Godman, Leroy Hayes	Journalism	98	25	Columbus
Good, Paul Revere, B. A		...	...	Westerville
Gordon, Sarah Bryarly	†	...	46	St. Mary's
*Gorham, Ira Garfield	Arts	126	16	Perrysville
*Gorman, Edward Albert	Arts	126	20	Columbus
*Graham, Reuben Jacob	E. Ph.	128	41	Northup
*Grant, Earl Cranston	Journalism	98	11	Grove City
*Green, Nellie Vitura	L. Ph.	126	72	Columbus
Greener, Gussie Howe	L. Ph.	126	66	Columbus
Gregg, Lillie	†	...	34	Triadelphia
Griswold, Edwin Viets	Arts	126	24	Worthington
Grovenbery, Ella	†	...	...	Columbus
Gruen, Frank William, B. Ph		...	...	Columbus

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	Course	Course Hours	Credit Hours	Home Address
Gudenkauf, August B.	Science	129	28	Sidney
Guittard Claude B.	M. L. Ph.	126	20	New Bedford
*Guy Rodney Foos.	M. L. Ph.	126	29	Plain City
Hains Edna Esther.	Arts	126	32	Bloomingburg
*Hambleton Ethel Ada.	L. Ph.	126	60	Columbus
Hardy Caroline Church.	†	...	19	Columbus
Harris Charles Pearl, B. Ph.		...	...	West Liberty
Hartsough Jessie Glenada.	L. Ph.	126	10	Columbus
Harward, Arthur Byron.	Arts	126	82	Columbus
Hatton, Edna Bernice.	L. Ph.	126	48	Columbus
Hauk, Will Comrie.	Science	129	55	S. Charleston
*Hayward, Claudius Cadot.	E. Ph.	128	10	Ironton
*Hazelton, Henson Marlow.	E. Ph.	128	64	New Straitsville
Hendrickson Bertha Edna.	†	...	...	Columbus
Herrman, Jennie	†	...	14	Worthington
Herrick, Sara Ethel	E. Ph.	128	52	Wellington
Hicks, Nellie	Arts	126	62	Centerburg
Hicks, Mary Chapple.	L. Ph.	126	22	Columbus
Hirsch Rudolph	Science	129	57	Columbus
Hoffhines, Ralph Eugene.	L. Ph.	126	...	Columbus
Hoffman, Hattie De Long.	E. Ph.	128	81	Columbus
*Holcomb, Harry John.	Arts	126	58	Columbus
*Holston, John George Frederick.	†	...	38	Zanesville
Holine, Mose A.	†	...	29	Columbus
Hoover, Fred R., B. Ph.		...	...	Columbus
Hopkins, Bertha Marie.	L. Ph.	126	21	Columbus
Hopkins, Clara M	L. Ph.	126	20	Columbus
*Hopkins, Edith Estelle.	L. Ph.	126	29	Columbus
*Houghton, Henry Spencer.	†	...	64	Columbus
Howard, Anna Faye.	L. Ph.	126	118	Columbus
Huddleson, Mabel Lee.	†	...	8	Columbus
*Hudson, Clara P.	E. Ph.	128	24	Middleport
Huffman, Lillian Stuart, B. Ph.		...	...	Columbus
Huggins, Burch Delaplaine, B. Ph.		...	...	Hillsboro
Hungelmann Arthur	Science	129	34	Columbus
*Hunt, Mary Fulton.	L. Ph.	126	68	Columbus
*Hunt, Wallace Leedom.	Science	129	39	St. Paris
*Hunter, Anna Eliza.	M. L. Ph.	126	38	Columbus
Hurst, Lulu Kate	†	...	6	Piketon
*Huston, Frank Arilda.	M. L. Ph.	126	52	Columbus
Hyneman, Rebecca Sara.	†	...	7	Columbus
*Jackson. Faye Marie.	E. Ph.	128	19	Columbus
‡Jameson, Plynn C.	Med.	100	10	Avon
Jaynes, Allan Brown.	E. Ph.	128	111	Columbus
Jeffrey, James Fred	Science	129	92	Columbus
Jeffrey, John Ralston	†	...	82	Huron
*Jenkins, Thomas Lewis.	Arts	126	2	Plain City
*Jennings, Elma	Science	129	26	Eaton
Johnson, Edith Cherry.	†	...	16	Columbus
Johnson, Lucy H.	†	...	10	Worthington

* Preparatory work incomplete.
† Special — not a candidate for a degree.
‡ Died October, 1898.

	Course	Course Hours	Credit Hours	Home Address
*Jones, Daniel C.	E. Ph.	128	26	Jackson
*Jones, Edgar Lloyd	E. Ph.	128	37	Columbus
*Jones, Helen Perley	E. Ph.	128	22	Columbus
*Jones, John William	E. Ph.	128	56	Jackson
Jones, Richard Thomas	L. Ph.	126	107	Columbus
Jones, Victor Waite	E. Ph.	128	71	Columbus
Karshner, George Melville	Arts	126	91	Columbus
Kauffman, Henrietta Christine	M. L. Ph.	126	56	Columbus
*Kauffman, Margaret Glenn	M. L. Ph.	126	47	Columbus
Keating, David Thatcher, B. Ph		...	...	Columbus
Kellerman, Karl Frederick	Science	129	109	Columbus
Kinder, Gordon Donald	E. Ph.	128	85	Ottowa
*King, Bernice	Arts	126	24	Columbus
King, Robert James, B. A		...	...	Zanesville
Klein, David	†	...	102	Columbus
Knight, Caroline Estell	E. Ph.	128	78	Columbus
Kunkle, Fred Raymond	M. L. Ph.	126	24	Bryan
Kutz, Mabel	†	...	8	Milo
*Laybourn, Lawrence E	Journalism	98	38+12	Springfield
Lehman, John Wesley, B. Ph		...	...	Can. Winchester
*Lentz, Florence	M. L. Ph.	126	43	Marysville
Lisle, Charles Howard	E. Ph.	128	83	Pataskala
Lisle, Dallas Gypsi, B. Ph		...	...	Columbus
Lisle, Leslie Mac, B. Ph		...	...	Columbus
Logsdon, Carey Ligouri, B. Ph		...	...	Columbus
*Loren, Mary	L. Ph.	126	21	Columbus
Luse, Jessie Edna	E. Ph.	128	99	Columbus
*Lyons, Nellie	E. Ph.	128	24	Columbus
Machwart, Washington J	†	...	34	Fredericksburg
Mann, Wilbur Edwin, B. Ph		...	...	Morrisville
Markel, John Riegel	†	...	20	Adelphi
*Marriott, Robert Henry	Science	129	63	Richwood
Martz, Velorus	Arts	126	66	Columbus
*Meade, Caroline Annis	M. L. Ph.	126	43	Columbus
Merkle, Albert Edward	Med.	100	31	Chillicothe
*Miller, Charles Reed	E. Ph.	128	26	Bellville
Miller, Fred A	E. Ph.	128	67	Columbus
Miller, Gretchen Pauline	E. Ph.	128	103	Columbus
*Mitzenberg, Allena May	L. Ph.	126	64	Columbus
Mock, Marcia Inez	L. Ph.	126	66	Columbus
Moloney, William Patrick	†	...	34	Prospect
Moon, Victor Clarence	M. L. Ph.	126	83	Farmer's Statior
Moore, Edgar Howard	Science	129	107	Columbus
*Morgan, Roy	E. Ph.	128	34	Greenland
*Muirie, Frederick John	Arts	126	28	Youngstown
Mumma, Marion W	Science	129	72	Dayton
Mundhenk, Herbert C., B. Ph		...	...	Brookville
Mundhenk, Ruth, B. Sc		...	...	Dayton
Murdock, George Washington	E. Ph.	128	101	Carroll
*McAllister, Earl Saddler	E. Ph.	128	65	Columbus
McCallum, Raymond	E. Ph.	128	88	Dayton

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	Course	Course Hours	Credit Hours	Home Address
McDonald, Joseph Sylvester	E. Ph.	128	63	Rendville
*McGrew, Elizabeth Leanna	E. Ph.	128	36	Columbus
*McIntire, Clifford Samuel	E. Ph.	128	28	Ortonville, Mich.
McKelvey, Ralph Huntington	Arts	126	43	Sandusky
McKinney, Frank C	Arts	126	72	Columbus
McLaughlin, Clarence Graham	L. Ph.	126	62	Columbus
McLaughlin, Robert H	†	...	39	Fostoria
Nash, Simeon	Arts	126	64	Columbus
*Neiderhouse, Charles Henry	L. Ph.	126	...	Perrysburg
Neiswander, Lisle W	Med.	100	51	Grove City
*Nesbitt, David M	Journalism	98	27	Bellaire
Nichol, Gertrude Bell, B. Ph		...	...	Columbus
Nichols, Ada May	M. L. Ph.	126	34	Chillicothe
*Norris, John S	M. L. Ph.	126	38	Columbus
Ort, Mary Elizabeth	†	...	10	Ironton
Orton, Samuel Toney	Science	129	49	Columbus
Osborn, Abner Andrews	Science	129	94	Columbus
*Parmenter, William Watt	Arts	126	94	Mt. Vernon
*Parsons, George McLellan	L. Ph.	126	61	Columbus
*Partridge, Bert Mitchell	Journalism	98	22	Flint
Patterson, Bertha Gildersheve	Arts	126	72	Columbus
*Pavlicek, Frank J	L. Ph.	126	55	Toledo
*Peoples, Emmet W	Arts	126	21	Pomeroy
Pitts, Grace Lenore	L. Ph.	126	98	Columbus
*Plum, Harley Martin	Arts	126	28	Ashville
*Pocock, Lucy Hunt	E. Ph.	128	34	Columbus
*Poole, Loren Winfield	E. Ph.	128	62	DeGraff
*Poorman, John D	Journalism	98	...	St. Paris
*Porter, George Henry	L. Ph.	126	58	N. Philadelphia
Potts, Helen Georgiana	†	...	12	Columbus
*Powell, Cornelia	Arts	126	24	Columbus
*Prince, Frank Joseph	Science	129	44	Millerstown
Pulling, Margaret Glaze	L. Ph.	126	88	Columbus
*Pumphrey, Josiah Merton	Med.	100	33	Martinsburg
Raymond, Maud, B. Ph		...	...	Columbus
*Raymond, Maybelle	E. Ph.	128	42	Columbus
Redrow, Clara M	M. L. Ph.	126	19	Williamsburg
Redrow, Walter Leffingwell	Science	129	105	Williamsburg
Rees, Edith Celeste	Arts	126	68	Columbus
*Reese, David R	Arts	126	52	Shawnee
Reinhard, Frank J., Jr	E. Ph.	128	40	Columbus
Reütinger, Ernest Victor	Med.	100	31	Chillicothe
Rice, Susan Esther, B. A		...	...	Columbus
Richardson, William Waddle, B. Ph		...	...	Columbus
Rickey, Tallmadge Archer	E. Ph.	128	94	Columbus
*Ridenour, Walter Ashton	Journalism	98	24	Jackson
Rietz, Henry Lewis, B. Sc		...	...	Gilmore
*Rittenhouse, Pearle Gertrude	L. Ph.	126	28	Ostrander
Roach, Simeon Andrew, B. Ph		...	...	Chillicothe
Robbins, George A., B. Ph		...	...	Columbus
Rockwell, Mary Fannie, B. Ph		...	...	Columbus

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	Course	Course Hours	Credit Hours	Home Address
*Rodocker, Oris Calvin	Arts	126	...	Hicksville
Roebuck, Carl Fletcher	E. Ph.	128	103	Dalton
Rogers, Frank P., B. A.		...	...	Columbus
*Rogers, John B.	Journalism	98	22	Fostoria
*Rogers, Pennock B.	Med.	100	...	Columbus
Roney, Mary Malvina	L. Ph.	126	66	Columbus
*Rushton, Norman	E. Ph.	128	32	Selkirk, Ontario
Sackett, Carl Leroy	†	...	67	Big Horn, Wyo.
Sackett, Walter George	Science	129	27	Columbus
*Sadler, Anna Belle	L. Ph.	126	37	Columbus
Sayre, Charles Boyd	Arts	126	98	Columbus
Scarlett, Henry L.	Arts	126	66	Columbus
Schaff, Mae B.	L. Ph.	126	94	Columbus
*Schantz, Albert J.	Science	129	28	Dayton
*Schille, Clara Margaret	E. Ph.	128	27	Columbus
Schoedinger, Ferdinand P.	Arts	126	38	Columbus
*Schönthal Derso Clarence	E. Ph.	128	25	Columbus
Scott, Dudley	E. Ph.	128	90	Columbus
*Settle, Howard	Med.	100	...	Grove City
Seymour, Raymond Jesse	Science	129	96	Columbus
*Shaw Harry R.	E. Ph.	128	47	Zanesville
Singleton, Charles T.	E. Ph.	128	79	Columbus
Sleeper, Ethel Burson	L. Ph.	126	18	Columbus
*Sloan, Charles A.	Journalism	98	17+3	Columbus
Smart, George Alexander	E. Ph.	128	2	Dayton
Smith, Albertine Charlleen	E. Ph.	128	105	Columbus
*Smith, Harold Osborn	L. Ph.	126	26	Columbus
Smith, Virginia Roletta	E. Ph.	128	104	Columbus
*Snow, Mason Jay	Journalism	98	26	Columbus
*Snyder, Arthur Talmadge	Arts	126	28	Paris
*Sparks, Homer H.	Journalism	98	56+3	Columbus
Spencer, Ralph Oliver, B. A.		...	...	Columbus
*Sperry, Wilmot, Jr.	E. Ph.	128	57	Mt. Vernon
Sprague, William Ralph, B. Ph.		...	...	Columbus
*Staley, Homer F.	Arts	126	32	Columbus
Stanton, Frederic Moses	Med.	100	16	Ridgeville
Stauffer, Clinton	Science	129	96	Columbus
Steeb, Carl E., B. Ph.		...	...	Medina
Stephenson, Bertram Sheaver	L. Ph.	126	58	Jackson
*Stevenson, Ray David	L. Ph.	126	24	Fostoria
*Stewart, Gilbert Holland, Jr.	Journalism	98	18	Columbus
Stimmel, Branson Claud	†	...	32	Columbus
Stimson, Charles Leslie, B. A.		...	...	Columbus
Stimson, George	Arts	126	91	Columbus
Sullivan, Oscar M.	Arts	126	36	Columbus
*Swaney, Sara C.	Journalism	98	20	East Liverpool
*Swift Samuel Ferguson	E. Ph.	128	34	Jackson
Taylor, Bessie Battelle	L. Ph.	126	38	Columbus
*Taylor, William Harry	E. Ph.	128	37	Columbus
*Teter, Millicent	M. L. Ph.	126	12	Columbus
Theobald, Clara Freya	†	...	18	Columbus

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	Course	Course Hours	Credit Hours	Home Address
Thomas, Lawrence David	L. Ph.	126	92	Lancaster
*Thompson, King Gibson	E. Ph.	128	68	Georgetown
*Tilton, Josephus Howard	E. Ph.	128	79	Jelloway
*Travis, Fred L	Arts	126	77	Pana, Illinois
*Travis, John F	Arts	126	82	Green Camp
*Turner, Bertha Lewis	M. L. Ph.	126	9	Columbus
*Van Sciever, Mae	E. Ph.	128	31	Columbus
*Veneman, Nevin Edward	Journalism	98	52+3	Dayton
Vinson, Albert E	†	...	80	Columbus
Wallace, Manch J	Arts	126	16	Columbus
Walsh, Frances Lyon	Arts	126	29	Columbus
Ward, Lila Lucile	L. Ph.	126	68	Reynoldsburg
Wagner, Bertha Emma	†	...	2	Belle Center
Ward, Philip Emerson, B. Ph		...	...	Willoughby
Webster, Howard	†	...	32	Dayton
Weick, Carrie Rosina	Science	129	67	Columbus
*Weld, Harry Porter	L. Ph.	126	86	Marysville
*Welling, Cornelia Faith	Arts	126	64	Worthington
*Wells, Harry B	Arts	126	28	Columbus
Wells, Jessie Lauretta	†	...	...	Millgrove
Wertz, Edward Sleeser, B. Ph		...	...	Dalton
West, Earl Downs	Arts	126	92	Columbus
*Whitaker, William Earl	E. Ph.	128	57	Wauseon
*White, Carroll Agnew	L. Ph.	126	21	Marysville
Whiteside John Wesley	E. Ph.	128	46	Bloomingburg
William, Anna E., B. Ph		...	...	Jackson
Williams, Clara Maude	M. L. Ph.	126	87	Columbus
Williams, Elza Young	Science	129	72	Pomeroy
*Wilson, Lewis Ernest	E. Ph.	128	60	Columbus
Wilson, Stella S	†	...	2	Columbus
Worcester, Wood Frank, B. Ph		...	...	Columbus
Young, Dallas A	†	...	26	Dayton
Young, John Wesley, B. Ph		...	...	Columbus
Young, Mary Grace	M. L. Ph.	126	98	Mt. Vernon

COLLEGE OF ENGINEERING

GRADUATE STUDENTS — 6

	Home Address
Hale, Frederick James, M. E.	Mogadore
Hewitt, Strafford Reeves, M. E. in E. E.	Columbus
Judd Horace. M. E.	South Hadley Falls, Mass.
Krumm, Louis Ralph, M. E. in E. E.	Columbus
McIntire, Alfred Heber, M. E. in E. E.	Mt. Vernon
Snively, Harry H., B. A.	Columbus

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UNDERGRADUATES — 338

	Course	Course Hours	Credit Hours	Home Address
*Abbott, Donald Coleman	E. E.	220	5	Columbus
*Albery, Herman William	C. E.	214	25	Columbus
Alford, Arthur Milton	M. E.	220	94+4	Windham
*Ames, Holiday	C. E.	214	34+3	Ashland
*Armstrong, William Wirt	M. E.	220	...	Woodsfield
*Arnold, Charles H.	M. E.	220	56	New London
*Arons, Richard Demront	E. E.	220	2	Columbus
Atkinson, Warren, M. E.		...	...	Greenville, S. Ca
*Bailey, Edward Harding	M. E.	220	60	Damascus
Bailey, Ervin George	E. E.	220	47	Damascus
Balcomb, Charles	Chemistry	202	41	North Ridgevill
*Balz, Ernest	C. E.	214	48	Columbus
*Balz, Louis Christian Frederick	C. E.	214	47	Columbus
*Barringer, John Martin	Chemistry	202	60	Washington,D.C
Barringer, Lawrence Eugene	Ceramics	207	143+5	Washington,D.C
*Barry, William John	C. E.	214	38	New Straitsvill
*Bauer, Louis E.	E. E.	220	30+5	Springfield
*Baughman, Norman	E. E.	220	42	Roseville
Baumann, John Carl Bernhardt	Mining S.	91	59+8	Gütersloh, Germ
*Bauroth, Walter John	M. E.	220	53	Springfield
*Beach, Charles Wesley	E. E.	220	42	Geneva
Beauchamp, Earl G.	M. E.	220	...	Hamilton
*Bedwell, Charles Francis	E. E.	220	20	Columbus
Berkey, Leslie Reese	Ceramics S.	90	84+5	Bolivar, Pa.
Berndroth, Geary Martin	E. E.	220	42	Geneva
Billingsley, Robert Wallace	M. E.	220	54	Lisbon
Bischoff, John Wallace, E. M.		...	...	ElkGarden,W.Va
Bleininger, Albert Victor	†	...	120	Columbus
Blose, Miller L.	E. E.	220	206	Urbana
Boehme, Adolph Joe	M. E.	220	103+3	Youngstown
Bogardus, Evert	M. E.	220	48	Mt. Vernon
Bohm, Oscar Herman	Mining S.	91	91+8	Cleveland
Borger, Charles S.	M. E.	220	86	Columbus
*Bostwick. Oliver Newton	E. E.	220	50+3	Mount Sterling
Bott, George Robert	M. E.	220	88	Columbus
*Bowden, Harry William	C. E.	214	139	Minerva
*Bowditch, John Henry	C. E.	214	83	Tracy
Bowdle, George Frederic	M. E.	220	40	Piqua
Bownocker, Francis Marion	Ind. Arts S.	96	35	Columbus
Branum, Frank C.	E. E.	220	36+2	Bridgeport
Britton, Lloyd C.	C. E.	214	36	Williamsburg
*Brooks, Herbert Barton	E. E.	220	58	Piqua
*Brooks, Wheeler Athens	E. E.	220	2	Ironton
Brophy, James Francis, E. M.		...	...	ElkGarden,W.Va
Butler, John Francis	Ceramics S.	90	70+20	Austin, Texas
Bygate, Harry Goldsmith, M. E.		...	...	Steubenville
Cain, John	Chemistry	202	113	Urbana
*Calkins, Arda Hall	Chemistry	202	4	Columbus
Cameron, Harry Ezra	C. E.	214	104	Lisbon

* Preparatory work incomplete.

† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
Campbell, Rollo Wilbur	E. M.	208	50	Fostoria
Campbell, Willis Elmer	C. E.	214	53	Fostoria
Cannan, William	Ceramics S.	90	45+5	Plymouth
Cappel, William Frederick	M. E.	220	...	Dayton
*Caskey, George Alexander	M. E.	220	49	Columbus
*Cavanaugh, Andrew Francis	M. E.	220	166	Dayton
*Cavin, Frank Thomas	E. E.	220	60	Spencer
*Chaffin, Wendel Wilson	C. E.	214	50+12	Dayton
Chandler, Homer Payne	E. E.	220	54+13	Columbus
*Chandler, Fred	Ind. Arts	201	44	New Comerstown
*Childs, Maxwell	E. E.	220	18	Troy
Clark, Clarence Julian, C. E.		...	...	Wilberforce
*Clarke, James Ulrick	E. E.	220	54	Lancaster
*Closson, Clayton Drew	†	...	126	Galena
Coleman, Albert C.	Ind. Arts S.	96	18	Windsor
Comstock, Aytch Clay	E. E.	220	11	Nelsonville
Connors, John Leo	Mining S.	91	15+4	Columbus
Conrad, Verne Louis	C. E.	214	44+6	Columbus
*Cooke, Royal Alston	E. E.	220	104+10	Wyoming
Cooley, James Riddle	E. E.	220	16	Nelsonville
Cornell, Charles Brown	M. E.	220	52	Columbus
Cory, Mark Dee	C. E.	214	11	DeGraff
Cosley, Harvey Harter	C. E.	214	104	Troy
*Cox, Ross Stillwell	M. E.	220	27	Lewisburg
Crabill, Pearl P	M. E.	220	66	Springfield
Crable, Arthur	C. E.	214	134	Columbus
Crable, George	M. E.	220	50+3	Columbus
*Crumley, Cloise Hamilton	E. E.	220	51+7	Lancaster
Cryder, Howard Michael	Arch.	154	52	Chillicothe
Curtis, Leigh Goodrich, C. E.		...	...	Hamilton
Damon, Owen H	C. E.	214	139	Hinckley
*Dann, Walter M	E. E.	220	54	Columbus
*Davis, Charles L	E. E.	220	34	West Alexandria
Davis, George A.	Ceramics S.	90	76+8	Shawnee
Davis, Thomas John	Ceramics S.	90	30+34	Girard
*Denny, Charles Wampler	E. E.	220	89	Middletown
De Wolf, Roger Dennison	E. E.	220	109+6	Madison, Ga.
*Diehl, Joseph A	Arch.	154	38+3	Defiance
Dierdorff, Percy Cyrus	M. E.	220	53+7	Columbus
Dill, Raymond	E. E.	220	111+5	Columbus
*Dobyns, Harvey Britton	E. E.	220	2	Columbus
Dole, Parr H	M. E.	220	21	Columbus
Doty, Charles Wilgerson	†	...	...	Hanging Rock
*Drummond, William George	M. E.	220	152+8	Cleveland
Duke, Carl Lewis	E. E.	220	116+6	Ridgeville
Dunlop, Robert Rowse	E. E.	217	163	Columbus
*Elliott, Emmett Foster	Arch.	154	47	Chesterhill
Elsner, Richard E	C. E.	214	39	Newark
*Eno, Imle L	E. E.	220	97+5	Pomona, Cal.
Erdmann, William	Ind. Arts	201	162	Chillicothe

* Preparatory work incomplete.
† Special — not a candidate for a degree.

	Course	Course Hours	Credit Hours	Home Address
*Espy, Frank	†	...	58	Kenton
Evans, Charles Hopkins	Mining S.	91	40	Evanston
*Falkenbach, Schatz	Chemistry	202	4	Columbus
Ferguson, Morse Burton	Ind. Arts	201	...	Hanover
*Ferry, Roy W	E. E.	220	...	Leon
Fickes, Walter M	Ceramics	207	142	Steubenville
*Flory, Charles Henry	E. E.	220	24	Arcanum
*Follett, George Alfred	C. E.	214	65	Columbus
Ford, Nile Otis	E. M.	208	99	Wheeling, W.Va.
Fornof, Carl William	M. E.	220	13	Columbus
Foster, George C	E. M.	208	53	Schooley
Fouts, Edgar W	E. E.	220	111	Piqua
Frame, Rollo St. Clair	C. E.	214	99	Washington
Frankenberg, George T	M. E.	220	54	Columbus
Frankenberg, John Theodore, E. E.		...	...	Columbus
Frechtling Arthur George	M. E.	220	107+4	Hamilton
Freer Will Davis	E. E.	220	42	Cortland
Friedland Francis William	Mining S.	91	35+8	Coalton
Frost George Winfield	M. E.	220	163	Columbus
Gamper, Herman, M. E.		...	...	Columbus
*Gates, William Paul	Ceramics	207	69+6	Hinsdale, Ill.
George, Robert G	E. M.	208	14	Piqua
Geren, Arthur G	Mining S.	91	30+10	Columbus
Geren, Harry Ogden	E. E.	220	148+21	Columbus
Gilchrist, Edward Luce	E. E.	220	57+3	Ashtabula
*Gleichauf, Frank S	Arch.	154	46	Newark
Gottwald, Christian	E. E.	220	117+2	Defiance
Graham, Frank	E. M.	208	38+5	Columbus
*Graham, Harry	E. M.	208	38+12	Columbus
*Gray, Thomas M	M. E.	220	25	Pittsburgh, Pa.
Green, Homer Stuart	E. E.	220	102	Raymond
Green, Joseph Walter, E. E.		...	...	Dayton
Hager, Le Roy William	C. E.	214	78	Piqua
*Hambleton Charles Reverdy	E. E.	220	...	Hooksburg
Hammond John Miller	C. E.	214	41+2	Columbus
Hance Harry Thomas	Chemistry	207	97	Columbus
Hapgood, Eugene Palmer	E. E.	220	78+3	Sabina
*Hardy, Paul	E. M.	208	37	Columbus
Harkins, Robert Rusk	M. E.	220	163	Columbus
Harmer, Frederick Sturges	Mining S.	91	15	Columbus
Harper, Ellahue A	†	...	15	Columbus
Harrigan, Archer	Mining S.	91	92	New Castle, Pa.
Harris, Emmet	E. E.	220	4	DeGraff
Harrop, Carl	C. E.	214	53	Columbus
Hayman, Will Clayton	E. E.	217	165+9	Holgate
Hedges, Benson Rice	M. E.	220	88	Columbus
Herms, Albert Edward	†	...	50	Columbus
*Herrick, Hobert C	M. E.	220	13	Wellington
Herrick, Nellie	†	...	144	Columbus
Hershey, Arthur	Ind. Arts S.	96	5+7	Columbus
Hertner, John Henry, E. E.		...	...	Dayton

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	Course	Course Hours	Credit Hours	Home Address
*Higgs, Howard Clyde	E. E.	220	6	Newark
Hill, Harry Earl	C. E.	214	53	Richwood
Hirabayashi, Seikichi	†	...	3	Nagoya, Japan
Hirst, Harry	M. E.	220	41	Midvale
Hitch, James Frank	C. E.	214	53	Batavia
Holbrook, George Frederic	E. M.	208	36	Bucyrus
*Hord, Peyton Robert	E. E.	220	35+7	Marion
*Huddleson, Frank	M. E.	220	73+7	Columbus
*Hull, Walter Austin	E. E.	220	54	Orangeville
Hunter, Madone Carington	E. E.	217	161+5	Norwich
Huntington, Arthur, M. E.		...	...	South Charleston
Ittner, Warren Payne	Ceramics S.	90	88+14	St. Louis, Mo.
*Jacobs, Ronald	Ind. Arts	201	12	Columbus
*James, Frank Richard	E. M.	208	50	Columbus
*Jayne, Walter G.	E. E.	220	22	Springfield
Johnson, Earl S.	E. E.	217	158	Plants
Johnson, Walter A.	M. E.	220	52	Columbus
*Johnston, Howard Charles	M. E.	220	129+4	Rushsylvania
Jones, Howard Martin	E. E.	220	111+2	Marysville
Jones, Herbert Q.	†	...	60	Granville
Kanmacher, Samuel Houston	E. E.	217	170+16	Columbus
*Keating, Harvey Thomas	C. E.	214	48	Columbus
Keller, Daniel Casteel	E. E.	220	54	Washington C.H.
Kern, William Frederick	Chemistry	202	56	Bellaire
Kettering, Charles Franklin	E. E.	220	51	Loudonville
Kettler, Frank Christian	C. E.	214	104+6	New Bremen
King, Francis Emmet	Mining S.	91	53+2	Leisenring, Pa.
*King, Herbert Summer	C. E.	214	145+9	Medina
*Kinnear, Harry Baldwin	E. E.	220	50+5	Mt. Sterling
*Kinnison, Ernest Eugene	C. E.	214	48	Jackson
Kirker, Gaylord B.	Mining S.	91	30	Catlettsburg, Ky.
*Knieling, Charles August	E. E.	220	47	Willoughby
*Knight, William Abner	M. E.	220	190+3	Columbus
*Knoderer, Homer Guy	E. E.	220	55	Columbus
Knouff, Oliver Morton	C. E.	214	43+2	Caldwell
Knox, Frank S.	E. M.	208	160+10	Columbus
‡Krause, Wilbur F.	M. E.	220	4	Columbus
Krumm, Thomas Zettler	C. E.	214	43	Columbus
*Laiblin, Garfield	M. E.	220	49	Canton
Lamb. Whitney Earl	E. E.	217	165+6	CommercialPoint
*Lampert, John Martin	M. E.	220	58	Xenia
Lee, Corliss Edgar	E. E.	217	185	Pugh Post Office
*Leibold, Carl Peter	E. E.	220	40+6	Columbus
*Leinbaugh, George Gurden	M. E.	220	147+3	Bellevue
*Leith, Harry H.	C. E.	214	34	Wellsville
*Lesh, John Howard	M. E.	220	100	Louisville
*Lied, Ernst Mitchell	E. E.	220	40	Columbus
Linebaugh, Jesse Joseph, E. E.		...	...	Pleasant Corners
*Linhart, Frank Clement	C. E.	214	38	Broughton, Pa.
Linville, Clarence Philander	Chemistry	202	147	Urbana

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† Special — not a candidate for a degree.
‡ Died October 29, 1898.

	Course	Course Hours	Credit Hours	Home Address
Lockwood, Howard Thomas	C. E.	214	53	Batavia
Lontz, Harley C.	Mining S.	91	25	South Bend, Ind.
Lyon, Arthur Hollingshead	M. E.	220	166	Wauseon
*Marckworth, Otto Stanley	†	...	125	Cincinnati
Marietta, Harry Riefsnider	E. E.	220	72+5	Dayton
*Marsh, Charles Lawrence	C. E.	214	109	Urbana
Marshall, Willard Beverley	E. E.	220	177	Piqua
Martin, John D., Jr	M. E.	220	133+12	New Straitsville
Mason, John T	†	...	15	Columbus
*Mason, Charles Filmore	E. E.	220	43+6	Columbus
*Melick, Neal Albert	C. E.	214	155	Columbus
Miller, Albert Arthur	E. E.	220	94+18	Zanesville
*Miller, Charles Emit	Arch.	154	96+3	Spencer
*Miller, John Franklin	E. E.	220	57	Columbus
*Miller, Ralph Charles	E. E.	220	91+18	Zanesville
*Monsarrat, Charles R	M. E.	220	...	Columbus
*Morlan, Wilbert	M. E.	220	41+7	Rogers
Morris, Willard Bernard	M. E.	220	47	Columbus
*Morris, William Blaine	M. E.	220	54	Massillon
Morris, Robert Hamilton	E. M.	208	92+17	Columbus
Myers, Albert B	E. M.	208	153+10	Columbus
Myers, Fred	C. E.	214	13	Louisville
McEowen, Hugh Ellsworth	†	...	26	Greenville
*McFarland, Horace M	E. M.	208	53	Columbus
McHugh, Francis	Mining S.	91	15	Carrolltown, Pa.
McIntosh, Roscoe Everitt	E. E.	220	98+3	Ravenna
McKeon, Robert Dale	C. E.	214	41	Arcanum
*McKinney, Earl B	Arch.	154	44	Columbus
Needham, Harry Smithson	M. E.	220	166+8	Columbus
Nicholson, Charles Marion	E. E.	217	158	Columbus
*Nidy, Herbert C	E. E.	220	101	Greentown
Nold, John H	E. M.	208	153	Columbiana
Nurian, Kerson, M. E		...	...	Philipopolis,Bulg
Oakes, James	Mining S.	91	15	Jackson Cen.,Pa.
Ogbin, Clinton Vanneman	C. E.	214	92	Salem, N. J.
Osborn, Liphe Andrews	M. E.	220	41	Columbus
Pabodie, Robert J., M. E		...	...	Wyoming
*Panter, Thomas Alfred	E. E.	220	54	Niag'raFalls,N.Y.
*Parkin, William Z	M. E.	220	48	Columbus
*Parrett, Benjamin Creamer	Chemistry	202	45	Washington C.H.
*Patterson, Arthur Law	E. E.	220	42	ChinaGrove,N.C.
Peck, Francis J	†	...	28	Yellowbud
*Peck, Louis Tucker	Ind. Arts	201	81	Staunton, Va.
Peppel, Samuel Vernon, B. Sc	Chemistry	...	...	Leetonia
Peterson, John William	Arch.	154	...	Port Clinton
Phillips, William Merrian	E. E.	220	95+11	Columbus
*Pierce, Robert Clark	C. E.	214	4	Tallmadge
Post, Malcolm Phelps	Ceramics S.	90	83+6	St. Louis, Mo.
Poto, Frank B	Chemistry	202	97	Alliance
Potts, Royal Warren	†	...	52	Columbus
Pratt, Fred Kellogg	C. E.	214	150	New Philadelphia

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	Course	Course Hours	Credit Hours	Home Address
Purdy, Ross C	Ceramics S.	90	90+50	Buffalo, N. Y.
Ransom, Ralph P	M. E.	220	94	Mt. Vernon
Rawson, Levi, C. E		...	...	Lisbon
Reynolds, Carl	†	...	...	Columbus
*Riddle, Carlton	M. E.	220	175+15	Columbus
*Riebel, Leroy Clemens	Arch.	154	13	Columbus
Rightmire Robert Elwood	M. E.	220	72	Wheelersburg
Robbins, Edwin Thurston	†	...	41	Columbus
Rogers, Rutherford Hayes	E. E.	220	30+3	Columbus
*Roth, Clyde Ervin	E. E.	220	7	Tallmadge
*Roy, Charles Foster	E. M.	208	60+13	Glenroy
*Ryland, Paul Dillen	C. E.	214	119+2	Columbus
Sanderson, Clarence Herbert	E. E.	220	44	Logan
*Sanderson, Ray Rochester	E. E.	220	54+3	Washington C.H.
*Saxbe, Harry Moody	E. E.	217	74+2	Columbus
Sayers, Delbert Bancroft	E. E.	220	71+3	Marits
Schaeffer, Arthur	E. M.	208	...	Bucyrus
*Schaff, Harry M	E. E.	220	40	Columbus
*Schlochtermeyer, Carl Fred	E. E.	220	55	Cincinnati
*Schoenlaub, Thomas Jacob	C. E.	214	41	Marion
*Schott, Alvin Christian	E. E.	220	26	Massillon
Schreiber, George Ernst	E. E.	217	163	Ironton
Schreiber, John Martin, E. E		...	...	Ironton
Schwab, Frank Wilber	Chemistry	202	41	New Philadelphia
Senter, Herbert Pike	C. E.	214	52	Columbus
Sharp, John McDowell	C. E.	214	16	Columbus
*Shaw, Lucian	C. E.	214	36+3	West Lafayette
*Sheal, Leander	Chemistry	202	4	Steubenville
*Shepherd, Charles William	C. E.	214	153	Huron
*Sherman, John K	C. E.	214	110	Columbus
*Sherwood, Frank Porter	E. E.	220	74+8	Ashtabula
Shigley, Clarence Mason	†	...	16	Jamestown
*Shumate, Frank Douglass	E. E.	220	54	Urbana
Sigrist, Charles Ferdinand	Mining S.	91	54+7	Congress
Simcoe, George	Ceramics	207	31	North East, Md.
*Simpson, Henry Jerome	C. E.	214	58+3	Worthington
*Slater, Edward Earl	Mining S.	91	2	Nelsonville
Slick, Charles Jay	Mining S.	91	22	Mishawaka, Ind.
Smith, David William, C. E		...	...	Ashland
Smith, Harry Ford	M. E.	220	54	Lexington
Smith, John Baker	E. M.	208	24	Tiffin
Smith, James Oliver	E. E.	220	32	Columbus
Sprague, Clarence M., C. E		...	...	Summerford
Sproat, Amasa Delano	E. M.	208	53+6	Chillicothe
Staley, Marcellus, E. E		...	...	Dayton
Standish, Miles Walter	†	...	...	Lima
Starbuck, Carl, E. E		...	...	Barnesville
*Stark, Samuel	Ceramics	207	12	Tunkhannock, Pa.
*Sterling, James Gilman	M. E.	220	67	Springfield
*Stocker, James Arthur	C. E.	214	49	Gnadenhutten
Stone, Carleton Elijah, C. E		...	...	Gallipolis

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	Course	Course Hours	Credit Hours	Home Address
*Stull, Raymond Thomas	E. E.	220	44+3	Elkland, Pa.
Sweeney, Paul Leslie	E. M.	208	40	Columbus
*Tanners, Edward Wood	E. E.	220	54	Zanesville
Taylor, George Edwin	E. E.	220	100+2	Marysville
Thomas, Alfred Redman	Mining S.	91	40	Glouster
*Thomas, David A. P	Arch.	154	50	Columbus
*Thompson, Ezra John	C. E.	214	47	Kirtland
*Thompson, Ira Albert	E. E.	220	20	Cleveland
Trish, George	Mining S.	91	45	Nevada
Tufts, Charles H., E. M		...	...	Maineville
Van Dyke, Clifford Steele	E. E.	220	105	Ansonia
Voss, Harry Lincoln	Ind. Arts S.	96	15+10	Colo. Sp'gs, Col
Vosskuehler, Joseph Henry	M. E.	220	166+15	Dayton
*Waddell, Starling	E. E.	220	42	Columbus
*Walker, Robert Harris	E. E.	220	54	Cincinnati
*Ward, Vernon C., Jr	M. E.	220	54	Columbus
*Warwick, Martin Luther	Chemistry	202	...	Seven Mile
Weber, Frederick Clarence	Chemistry	202	79	Evanston
Webster, Ellison Godrey	M. E.	220	86	Greenville, S. C
Wellbaum, Arvy E	E. E.	220	54	Brookville
Wells, Byron Bliss	E. E.	220	49	Ostrander
Weyrich, Edward	E. E.	220	7	Dayton
Wheaton, Robert John	E. E.	220	37+4	Columbus
*Whetsel, Emerson Jay	C. E.	214	53	Jackson
Whitaker, George Eliot	C. E.	214	84	East Liverpool
Wilcox, Carl Clifford	M. E.	220	47	Columbus
Williams, Alwin Zeliffe	†	...	68	Chicago
Williams, Harry Ernest	M. E.	220	54	Harlem
Williamson Homer Davidson	E. E.	220	103+26	Monroe
Wilson, James Somerville	M. E.	220	109+17	Columbus
Wirthwein, Louis Philip, C. E		...	...	Columbus
Wonder, Homer Higgins	Chemistry	202	43	Carey
*Woodmansee, Roy David	M. E.	220	18	Highland
Worcester, Wolsey G	Ceramics S.	90	70+75	Columbus
*Yost, Lloyd	M. E.	220	42	Somerset
*Zbinden, Herman Christian	C. E.	214	87+4	Toledo

COLLEGE OF LAW

UNDERGRADUATES — 191

	Year	Home Address
Addison, Arthur Everett, B. Ph	Second	Columbus
Addison, Clarence Maywood, B. Ph	Second	Columbus
Allen, Edward Harrison, A. B	Third	Lena
Amos, Frank Craig	First	Sidney
Armstrong, Russell Livingston	Third	Celina
Armstrong, Thomas H	First	Hayesville

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	Year	Home Address
Arnold, Harry Crumley	Second	Columbus
Ashman, Frank	First	Coshocton
Austin, John Gustave, B. S.	Third	Sparta
Baggott, Roland Webb	Second	Dayton
Ball, George Gaylord	Third	Columbus
Bamer, Merton Leonard	First	Grand Rapids
Barrere, George Nelson	Third	Columbus
Bell, James Finley	Third	London
Benedict, Charles Yeddo	Second	Mansfield
Benner, Will D	Third	Croton
Bininger, James Wolfgong	Second	Lancaster
Blakesley, Philip	First	Dayton
Bockius, Harry Graham	Third	Canton
Bond, Charles Grosvenor	Third	Columbus
Bowers, Walton S	First	Hamilton
Brandt, James Herbert	First	Greencastle
Brewer, Charles Reed	Third	Bowling Green
Bright, Frederick Ijams	Second	Logan
Brumbaugh, Robert Nevin	Second	Dayton
Burgett, Willard M	Third	Salineville
Byers, William E	Second	Loudonville
Calkins, Frank Ellwood	Second	Grand Rapids
Carlisle, John Franklin	Third	Crestline
Cary, Charles Ross	Second	Millersburg
Carey, John T	First	Upper Sandusky
Chambers, Lyman K	Second	Genoa
Clark, Alexander B	Third	Canton
Clark, Clarence J	Special	Wilberforce
Cline, Walter Dew	Second	Dayton
Clum, Harry Ernest	Second	Thornville
Clutch, A. Ward, B. A	Third	Alcony
Courtright, Thurman Thomas	Second	Greencastle
Cox, Milton S	First	Sheldon
Crawford, William Harry	Second	Massillon
Curran, Bernard Franklin	First	Corning
Curtis, Leigh Goodrich	Special	Hamilton
Dally, John Randolph	Third	Centerburg
Darby, Roscoe Bryant	Second	Wauseon
Davidson, George Edwin	Third	East Liverpool
Dawson, Nathan Charles	First	Columbus
Deppen, Charles	Third	
Devol, Marion Luther	Third	Flint
DeWitt, Claude B	Second	Sandusky
Dille, Charles Wallace	Third	Nottingham
Donley, Russell Lee	Second	West Bedford
Doud, Harry L	First	Norwalk
Downing, Earl Summerville	First	Middleport
DuBois, Aaron Smock	Second	Franklin
Duff, Alfred L	Second	Port Clinton
Dunlap, Carl Reed	First	Columbus
Emmerling, John Valentine	First	Wauseon
Farnham, Harry Rathburn	Second	Edgerton
Fiebel, Louis	First	Hillsboro

	Year	Home Address
Finlay, Thomas Kirkwood	First	Keene
Flory, Charles Lewis	Third	Newark
Forsythe, John Lewis	Second	Cumberland
Frankenberg, Don Juan	First	Tempe, Arizona
Friedlich, Alfred	Second	Troy
Galloway, Arthur Clyde	First	Columbus
Game, Reed Haskell	Third	Canal Winchester
Gebhard, August Louis	First	Edgerton
Goddard, Edwin Newell	Second	Ashtabula
Godown, Joseph A	Third	Hilliards
Graven, D. Homer, A. B	Second	Nashville
Graff, Warren Noble, B. A	Third	Tiffin
Gross, Charles John	Third	Dayton
Gruen, Frank William	Third	Columbus
Haberer, Harry Andrew	First	Dayton
Hahn, Howard Edward	Third	Coshocton
Halverstadt, Herbert	First	Columbiana
Hamilton, Joseph Edson	First	Columbus
Hammond, Frederic Mathas	First	Smithfield
Hammond, Frank Nathan	First	Smithfield
Harvey, Arlington C., B. Ph., M. A	Third	Zanesville
Heacock, Irvin Francis, A. B	First	Alliance
Hershey, Harry Hartman	Second	East Greenville
Hoover, Frederic R	Second	Quincy
Hoover, George A	Third	Canal Fulton
Hough, Benson Walker	Third	Delaware
Howells, George A	Second	Massillon
Huggins, Burch Delaplaine	First	Hillsboro
Jacobs, Horace K	Second	Waynesville
Jahn, Nan	Second	Columbus
Jennings, Irwin G	Third	Zanesville
Jones, Bertram George	Second	Columbus
Jones, Charles Clark	Second	Wooster
Jones, Hanby Raymond	First	Westerville
Kellison, Edward Lafayette	Second	Quincy
Kinney, Harry B., B. Sc	Third	Belmont
Krupp, William E	Third	Uhrichsville
Lacey, Emmet	Third	Columbus
Lane, Quinton R	Second	Canal Wincheste
Lash, Henry Lloyd	First	Bolivar
Lehman, John Wesley	First	Canal Wincheste
Lloyd, Erastus Guy	First	Westerville
Malone, Francis Eastman	Second	Conneaut
Mallow, Lewis Earl	First	Washington C. H
Mattingly, Herbert Howard	Second	Celina
Mays, James Wesley, B. Ph	Second	South Point
Meier, William Henry	Second	Mt. Carmel
Meily, Warren Paul	First	Lima
Minshall, Thaddeus Ellis	First	Chillicothe
Minshall, William Edwin	Second	Chillicothe
Mithoff, George D	First	Lancaster
Moore, Henry Curtis	Second	Bainbridge
Morgan, Lewis W	Second	Gibsonburg

	Year	Home Address
Morris, Ingle Alman	Second	Columbus
Myers, Milo L	Third	Marysville
McCleary, Clayton Asa, B. Ph	Second	Science Hill
McClure, Robert Edward	Second	Dayton
McCoy, Frank Lewis	Third	Salineville
McCray, Thomas Yates, Jr	Second	Mansfield
McLaughlin, Clarence G	First	Columbus
Nicola, Benjamin Di	Second	Barnhill
Nicholas, William Renfrew	Second	Columbus
Nicholas, John C	Second	St. Clairsville
Orton, Walter Edwin	Third	Will'msto'n, Mass.
Osborn, Francis Coates	First	Columbus
Outhwaite, Singleton Peabody	Third	Columbus
Paisley, Jay S	Third	Irondale
Pease, Edward Livingston, B. A	Third	Columbus
Peck, Foreman Jacob	Second	Clarksburg
Pence, William D	First	Columbus
Polk, Winfred Whittington	Second	New Vienna
Poole, Loren Winfield	First	DeGraff
Poorman, John D	First	St. Paris
Porter, Burton Perlee	Third	Canal Fulton
Postlewait, Neal, A. B	Third	Valier, Pa.
Price, Thomas Daniel	Third	New Straitsville
Rawson, Levi	Special	Lisbon
Reed, Bert	First	Piqua
Reeves, Claude John	Second	Columbus
Roller, George Ellis	Second	Greencastle
Sackett, Carl Leroy	First	BigHornCity, Wy.
Schlesinger, Hugo Nathan	Third	Xenia
Schwenk, William Jennings, B. A	Second	Kenton
Seney, Allen Joshua, Ph. B	Third	Toledo
Seney, George Ebbert, Jr	First	Toledo
Shaw, John William	First	Troy
Shepherd, George Harvey	First	Dayton
Shipman, Leonard H	Third	Troy
Skiles, Roscoe Carleton	First	Shelby
Smart, George Alexander	First	Dayton
Smith, Charles Rylatt	First	Huron
Smith, David William	Special	Ashland
Smith, Warren Lee	Third	Columbus
Smith, Wellington Cornell	First	Lytle
Southworth, Ferdinand Leek	Second	Alliance
Sprague, Charles Franklin, B. A	Third	Wapakoneta
Sprague, Clarence M	Special	Summerford
Sprague, William Ralph	First	Columbus
Stevenson, Amos Claude, A. B	First	Fostoria
Stiger, Thomas A	Third	Bucyrus
Stone, Carlton Elijah	Special	Gallipolis
Stoolfire, Henri Stanton	Second	Columbus
Stough, Luther Bertrand	Third	Bellefontaine
Strecker, George William	Third	Marietta
Sullivan, J. Clarence	First	Columbus
Tangemann, Theodore H	First	Kettlerville

	Year	Home Address
Tanner, John Robert	First	Mt. Sterling
Thompson, George S.	Third	Smith's Ferry, Pa.
Toland, Harford Aquilla	Second	Columbus
Turner, Edward C.	First	Columbus
Van Sciever, Armand L.	First	Grove City
Voegele, William Frederick, Jr.	Second	Mansfield
Wakefield, George W.	First	Reynoldsburg
Warden, Hosea Gilford	First	Columbus
Ware, J. Walter	First	Dayton
Watkins, Howard Rice	Second	Blanchester
Weidling, Carl Philip	Third	Tiffin
Welsh, Harford Burnette	Third	Columbus
Wertz, Edward Sleeser	First	Dalton
West, Frederick Rollin	First	Columbus
Wharton, Homer Franklin	First	Washington
Wheeler, Newberry William, Jr.	First	Portland
Wildermuth, Andrew LeRoy	Third	Columbus
Williams, Lloyd Thomas, B. Ph.	Second	Jackson
Williamson, Allen Thurman, A. B.	First	Grandview
Wirthwein, Louis Philip	Special	Columbus
Woods, Charles Howard	Second	Chillicothe
Worcester, Wood Frank	First	Columbus
Worman, Horace Dye	First	Dayton
Wulff, August R.	First	Dayton
Yockey, Paul B., B. A.	Second	Columbus
Zimmer, Frank A.	Third	St. Paris

COLLEGE OF PHARMACY

GRADUATE STUDENTS—1

	Home Address
Landacre, Walter Alexander, G. Ph.	Columbus

UNDERGRADUATES—34

	Course	Course Hours	Credit Hours	Home Address
Bowen, Charles Flood	+	...	119	Columbus
Bradshaw, Harry James	Short	112	103+24	Columbus
Burr, Frank Henry	+	...	96	Columbus
Burt, Charles Conway	Long	206	59	Coshocton
*Canfield, Delos Wilford, Jr.	Long	206	75	Chardon
Clelland, Franklin Pierce	Short	112	68+3	Lockville
Day, Clayton Miller	Short	112	110+9	Blanchester
Foster, George Gruel	Short	112	58	Columbus
Funk, Roy William	Short	112	109+9	Chesterhill

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Gape, Arthur Garfield	Short	112	23	Ashtabula
Gardner, Charles Alfred	Short	112	53	Danville
Harvey, Lucy Manola	Short	112	54+55	Pomeroy
Hess, Ada E	Short	112	13	Bloomingburg
Holloway, David Frank	Long	206	139	Middletown
Huff, George Harry	Long	206	149	Middletown
Johnson, William Noel	Short	112	103+9	Piqua
Kathe, John Bernard	Short	112	110+7	Circleville
Kerr, Franklin Pierce, Jr	Short	112	110+6	Columbus
Kimberly, Charles Hubbell	Long	206	144+24	North Fairfield
Knowlton, Fred A	Short	112	15	Granville
Lallance, Leroy Armstrong, Jr	Short	112	85+9	Wheeling, W.Va.
Milligan, Herbert Ray	Short	112	...	Columbus
Naddy, Charles Joseph	Short	112	90+3	Columbus
Peck, James Francis	Short	112	71+4	Columbus
Potter, Lewis Hall	Short	112	96+14	Columbus
Rostofer, Freeman Allen	Short	112	105+6	Pataskala
Sandoe, DeNevin	Short	112	46+2	Columbus
Sellenings, Oscar	Short	112	43+24	Chillicothe
Swimley, Asbury Carlton	Short	112	18	Forest
Trump, August C	Short	112	...	Pherson
Vonderan, Charles Leo	Short	112	38	Waterford
Wagstaff, Harry Garfield	Long	206	82+5	Niles
Williamson, Frank Elwood	Short	112	5	Greenville
Young, Cyrus Homer	Long	112	47	Wooster

COLLEGE OF VETERINARY MEDICINE

GRADUATE STUDENTS—1

	Home Address
Brumley, Oscar Velos. D. V. M	Townwood

UNDERGRADUATES—11

	Course	Course Hours	Credit Hours	Home Address
*Detchon, Aubrey Bloxsom		178	168	Youngstown
Eddy, William		177	123	East Cleveland
*Griffin, Frank		177	111	Columbus
*Hammond, Harry James		177	120	Sharon Center
*Irwin, Albert N		177	57	Columbus
*Johnson, Jay Clement		177	18	Big Plain
*Johnson, Theodore Charlemagne		177	68	Akron
*Metzger, Edward Louis		177	46	Louisville
*Morrow, Charles James		177	120	Tiro
*Sparhawk, William Theron		178	171	Tallmadge
Umberger, Lee		177	...	Wytheville

* Preparatory work incomplete.

SUMMER SCHOOL—34

1898

Allen, Lucy Columbus
Bowman, Perla G..... Toledo
Boyd, Emma Columbus
Bradshaw, Mabel Ravenna
Detmers, Freda Columbus
Dufour, Alice Columbus
Drummond, William George..... Cleveland
Durham, Josephine Danville
Erf, Oscar Monroeville
Gale, Irene Columbus
Given, Ernest Sidney
Graham, Emma Sidney
Haig, Mary Columbus
Hock, Lulu Philo
Ingram, Imogene Columbus
Kanmacker, Houston Columbus
Keagle, Anna B..... Columbus
Knight, William Abner Columbus
Knopf, Eva S..... Columbus
Lewis, Magdalen Granville
Lewis, James Henry..... Gallipolis
Lynch, Elizabeth Greenville
Mullay, Rose Columbus
Naddy, Elizabeth Helen..... Columbus
Rankin, Harriet Minerva..... Columbus
Scott, John Willard..... Huntington, W. Va.
Smith, Russel Bigelow..... Ripley
Stephan, Edward Valentine..... Sardinia
Tooill, George Washington..... New Bremen
Vinson, Albert Earl..... Columbus
Voke, Mabel Columbus
Waddell, Starling Columbus
Winchet, Frances Isabelle..... Dayton
Wright, Helen Columbus

GENERAL SUMMARY

College of Agriculture and Domestic Science—		
Graduate Students	6	
Undergraduates	158	
	——	164
College of Arts, Philosophy and Science—		
Graduate Students	27	
Undergraduates	371	
	——	398
College of Engineering—		
Graduate Students	6	
Undergraduates	338	
	——	344
College of Law—		191
College of Pharmacy—		
Graduate Students	1	
Undergraduates	34	
	——	35

COLLEGE OF VETERINARY MEDICINE—		
Graduate Students	1	
Undergraduates	11	
		12
Summer School, 1898		34
Total		1,178
Names counted twice		29
Net total		1,149

SUMMARY BY COUNTIES.

Allen	2	Guernsey	4	Morrow	2
Ashland	9	Hamilton	8	Muskingum	16
Ashtabula	11	Hardin	4	Noble	1
Athens	6	Harrison	3	Ottawa	4
Auglaize	6	Henry	1	Perry	12
Belmont	13	Highland	3	Pickaway	5
Brown	5	Hocking	2	Pike	1
Butler	10	Holmes	2	Portage	6
Carroll	1	Huron	9	Preble	7
Champaign	13	Jackson	12	Putnam	4
Clark	8	Jefferson	8	Richland	8
Clermont	7	Knox	15	Ross	21
Clinton	8	Lake	6	Sandusky	2
Columbiana	15	Lawrence	11	Scioto	3
Coshocton	10	Licking	17	Seneca	9
Crawford	7	Logan	9	Shelby	6
Cuyahoga	9	Lorain	14	Stark	20
Darke	7	Lucas	6	Summit	7
Defiance	4	Madison	13	Trumbull	6
Delaware	7	Mahoning	5	Tuscarawas	12
Erie	11	Marion	5	Union	14
Fairfield	19	Medina	11	Vinton	1
Fayette	10	Meigs	9	Warren	8
*Franklin	426	Mercer	3	Washington	5
Fulton	5	Miami	19	Wayne	13
Gallia	2	Monroe	1	Williams	3
Geauga	3	Montgomery	37	Wood	5
Greene	4	Morgan	6	Wyandot	3

SUMMARY BY STATES AND COUNTRIES

(As far as known)

Arizona	1	Japan	1	Ohio	1067
Bulgaria	1	Kentucky	1	Ontario	1
California	1	Maryland	1	Pennsylvania	10
Colorado	1	Massachusetts	2	South Carolina	2
Georgia	1	Michigan	1	Texas	1
Germany	1	Missouri	2	Virginia	1
Illinois	3	New Jersey	1	Washington, D. C.	2
Indiana	4	New York	4	West Virginia	5
Ireland	1	North Carolina	1	Wyoming	2

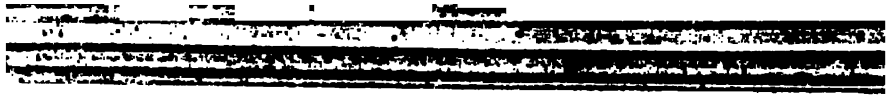
*Nearly forty-two per cent. of the students registered from Franklin county are those whose homes are at Columbus only during their University course.

OCCUPATIONS

OF THE PARENTS OF STUDENTS WHO HAVE ENTERED THE UNIVERSITY SINCE SEPTEMBER, 1895.

Abstractor	1	Lake marine	2
Architects	4	Laundryman	1
Bakers	2	Lawyers	89
Bankers and brokers	36	Lecturer	1
Barbers	2	Liquor dealers	2
Blacksmiths	3	Liverymen	3
Book-keepers	10	Machinists	9
Brewers	1	Manufacturers	100
Butchers	4	Masons	9
Carpenters	24	Merchandise, dealers in (not otherwise specified)	178
Cemetery superintendents	2	Mechanics	11
Circuit judge	1	Metal workers	5
City officials	5	Miners	10
Clerks	3	Ministers	32
Coal dealers	13	Musician	1
Collector	1	Padmaker	1
College presidents	2	Painters	2
County officials	16	Piano tuner	1
Dairymen	14	Photographer	1
Day laborers	17	Physicians	77
Decorators	2	Plasterers	4
Dentists	3	Printers	5
Dressmakers	2	Private corporation officials	9
Druggists	16	Potter	1
Electricians	2	Publishers	2
Engineers (civil)	9	Railway employes	46
Engineer (mechanical)	1	Real estate	31
Engineer (mines)	1	Retired	33
Engineers (stationary)	3	Saloonkeeper	1
Express agents	3	Shoemakers	3
Farmers	561	Silver-gilder	1
Florist	1	State officials	12
Furnace builder	1	Stenographer	1
Geologist	1	Stock dealers	6
Glassblower	1	Tailors	6
Grain dealer	1	Tanners	2
Government service	14	Teachers	38
Hotels and restaurants	11	Transfer	3
Horse dealer	1	Traveling salesmen	50
Ice dealer	1	Township clerk	1
Insurance	29	Undertakers	6
Janitors	2	Veterinary surgeon	1
Jewelers	5	Watchman	1
Journalists	21		

GRADUATES



GRADUATES

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor if any alumnus who changes his residence will notify the Executive office of his new address and occupation. They will also be grateful for any information from any source, that may assist in making or keeping the Directory of the Alumni complete and correct.

ALUMNI ASSOCIATION

OFFICERS FOR 1899-1900

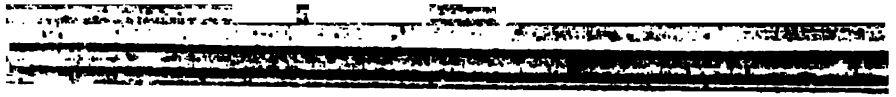
WILLIAM WHITE KEIFER, '86, Springfield.....*President*
HERMAN S. BRONSON, '97, Columbus.....*Vice-President*
MRS. CHARLES WING, '80, Columbus.....*Secretary*
FRANK A. RAYMOND, '88, Columbus.....*Treasurer*
JOSEPH S. MYERS, '87, Pittsburg, Pa.....*Orator*
G. GLEN ATKINS, '88, Greenfield, Mass.....*Alternate*

COMMITTEE ON COLLEGE AFFAIRS

WALTER J. SEARS, '94, Chillicothe.....	Term expires	1900
FLORIZEL SMITH, '80, Columbus.....	"	1901
MRS. HARRY I. ABBOTT, '93, Columbus.....	"	1902
LORING HAPGOOD GODDARD, '92, Sullivan, Ind.....	"	1903
KARL T. WEBER, '97, Columbus.....	"	1904

COMMITTEE ON NECROLOGY

WILBY G. HYDE, '87, Chillicothe.....	Term expires	1900
LOWRY F. SATER, '95, Columbus.....	"	1901
DAISY M. SCOTT, '87, Columbus.....	"	1902



DIRECTORY

A

Abbott, Arthur Grant, 1899, B. Sc. (Agr.), Medina.
Ackerman, Eli Osborn, 1884, C. E., 2664 North High street, Columbus, Columbus Street Railway Co.
Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.
Addison, Arthur Evert, 1895, B. Ph., Columbus, teacher East High School.
Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.
Addison, Clarence Maywood, 1896, B. Ph., Columbus, teacher Central High School.
Agler, Eulalia, 1895, G. Ph., Columbus, with Columbus Pharmical Company.
Albert, Louisa Mary, 1896, G. Ph., Mrs. A. E. Vinson, Columbus.
Aldrich, Chester H., 1888, B. A., LL. B., David Citv, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Westerville, secretary and manager Westerville Electric Light Co.
Alexander, St. Clair, 1893, M. E. in EE., Bridgeport.
Alexander, Charles P., 1896, M. E. in EE., Letart Falls, teacher of science.
Allaman, William Ernest, 1896, G. Ph., Brookville.
Allen, Edward Harrison, B. A. (Ohio Wesleyan University), 1899, LL. B., Lena.
Allen, Lucy, 1897, B. A., Columbus, library assistant, State University.
Alsdorf, Percy Reed, 1896, E. M., Central City, Col., Standard Assay office.
Alsdorf, Frederick Charles, 1892, E. M., Central City, Col., general manager, DuQuesne Mining Co.
Alspach, Rufus Edwin, 1897, M. A. (B. A. Heidelberg), Thornville.
Anderson, James T., 1884, B. A., Colorado Springs, Col., 1st Lieutenant U. S. Army.
Anderson, Newton M., 1879, B. Sc., Cleveland, Principal of the University School.
Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S., Ohio Wesleyan University), Zanesville.
Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.
Armstrong, Edna, 1897, B. Ph., Columbus.
Armstrong, William H., 1890, G. Ph., Marysville, druggist.
Arnold, Charles Lincoln, 1890, B. Sc., 1894, M. Sc., West Eighth ave., Columbus, assistant professor in mathematics, State University.
Arnold, Edwin E., 1898, M. E., Westinghouse Machine Co.
Atkins, G. Glenn, 1888, B. A., Greenfield, Mass., pastor Congregational Church.
Atkinson, Warren, 1899, M. E., Greenville, S. C.
Auld, James A., 1897, M. E. in EE., Columbus, with D. S. Auld, 76 East Gay street.
Austin, John Gustave, 1899, LL. B., Sparta.

B

Bachtell, Nellie May, 1895, B. A., New London, teacher.
Backhaus, Henry Ward, 1894, B. A., Wapakoneta, cashier People's National Bank.
Baer, Philip, Jr., 1897, B. Sc. (Agr.), Gratiot, creamery operator.

Bagley, Anna Gertrude, 1894, G. Ph., Columbus.
Baker, James Burt, 1898, LL. B., Salem.
Baker, John Ezra, 1897, B. A., 1898, LL. B., St. Paris.
Baker, William Hollister, 1892, B. Agr., Farmersville, Mo., farmer and stock raiser.
Baldwin, Elizabeth Grant, 1899, B. Ph., Columbus.
Baldwin, Zoa Belle, 1896, B. A., Prospect, teacher in High School.
Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus, fellow in mathematics, State University.
Ball, Fred S., 1888, B. Ph., Montgomery, Ala., attorney-at-law.
Bancroft, Gay, 1898, B. A., Columbus.
Barcus, Miner, 1897, M. E. in EE., Schenectady, N. Y., with General Electric Company.
Barlow, Helen M., 1898, B. Ph., Columbus.
Barnaby, Charles L., 1898, C. E., Columbus.
Barnaby, Josephine, 1896, B. Ph., Warren, teacher.
Barrows, Harry Holbrooke, 1898, C. E., Lexington, Ky., engineer on Queen & Crescent Ry.
Bartholomew, Clyde Stanley, 1896, C. E., Zanesville, civil engineer B. & O. Ry.
Basterdes, Ada Mabel, 1890, B. Ph., Plano, Ill., teacher in High School.
Bates, Josephine M., 1881, B. Ph., Mrs. Florizel Smith, Columbus.
Bates, Wesley C., 1882, LL. B., 35½ N. High street, Columbus, attorney.
Baughman, George W., 1897, G. Ph., Leipsic.
Beach, David Price, 1895, C. E., Wellsville, in employ of Pennsylvania Railroad.
Beach, Margaret Alice, 1891, B. Ph., Mrs. Wilson Holman, Bayonne, N. J.
Beardsley, Orasmus D., 1898, B. Ph., Garrettsville.
Beattie, William Renick, 1894, B. Sc., 1897, M. Sc. (in Horticulture), Columbus florist.
Beck, Arthur Andrew, 1893, C. E., Columbus, county surveyor's office.
Belden, Sanford Bonner, 1895, E. M., Chicago, Ill., with Chicago Electric Mining Engineering Co.
Bell, Mary Edith, 1894, B. Ph., St. Paul, Minn., teacher in High School.
Bennett, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill., attorney-at-law.
Bennett, Samuel E., 1890, D. V. M., Kansas City, Mo., Gov't Meat Inspector
Bently, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College) 15 Miller Road, Shanghai, China, missionary.
Bertsch, Joseph Franz, 1896, LL. B., Columbus.
Bibbee, George E., 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus.
Biebel, Herman Matthews, 1896, M. E. in EE., Chicago, Ill., electrical engineer with Western Electric Co.
Bischoff, John Wallace, 1899, E. M., Elk Garden, W. Va.
Bissing, William, 1893, M. E. in EE. (A. B., John's Hopkins University), Washington, D. C., examiner in U. S. patent office.
Blackburn, Frank H., 1896, M. E. in EE., Tres Piedras, N. M., Supt. Buckeye Mica Mining Co.
Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.
Blakiston, Anna Houston, 1897, B. Ph., Mrs. Powell, Pittsburg, Pa.
Blakiston, Mary, 1893, B. Ph., Columbus, teacher in East High School.
Blinn, Ray S., 1893, B. S.
*Bloom, Edwin M., 1893, B. Sc., died, 1894.
Bloom, J. George, 1889, C. E., Cincinnati, assistant engineer B. & O. S. W. Ry.
Bloomfield, Lloyd Morris, 1891, B. Agr.

Bock, Harrison W., 1898, LL. B., 1899, B. Ph., Canton.
Bockius, Harry Graham, Ph. B. (Yale University), 1899, LL. B., Canton.
Bodman, Mary E., 1898, B. Ph., Bement, Ill.
Boesche, Felix John, 1896, G. Ph., New Bremen.
Boesel, Frank Tilden, 1896, B. Ph., student, Harvard Law School.
Bogue, Ernest Everett, 1894, B. Sc. H. & F., 1896, M. Sc., Professor of Botany and Horticulture, Agricultural and Mechanical College, Norma, Okla.
Bond, Charles Grosvenor, 1899, LL. B., Columbus.
Bone, John H., 1893, B. Sc., 1896, B. Sc. (Agr.), assistant in Agriculture, Agricultural and Mechanical College, Norma, Okla.
Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D., Columbus.
Bope, George W., 1897, LL. B., Columbus, third assistant director of Law.
Bower, Jerome G., 1897, M. E., Dennison, P., Ft. W. & C. R. R.
Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, associate professor in Inorganic Geology, State University.
Boyd, Emma, 1888, B. Ph., 38 W. Woodruff ave., Columbus, teacher in the North High School.
Boyd, James G., 1897, D. V. M., Columbus.
Boyd, James Ellsworth, 1891, B. Sc., Columbus, assistant professor of Physics, State University.
Boyd, Martin L., 1897, LL. B., Columbus.
Bradford, Ernst, 1892, G. Ph., S. Garfield ave., Columbus, chemist.
Bradford, Joseph Nelson, 1883, M. E., 54 West Tenth ave., Columbus, associate professor of drawing, State University.
Brand, Harry Frank, 1896, B. Ph., 1897, LL. B., Worthington.
Brandt, James Herbert, 1899, B. A., Greencastle.
Brandt, Ulysses Sherman, 1895, B. A., Canal Winchester, superintendent schools.
Braun, Joseph G., 1897, G. Ph., Columbus.
Brelsford, Harley, 1898, B. Ph., Christiansburg.
Brewer, Charles Reed, LL. B., Bowling Green.
Brewer, John Whitney, 1896, G. Ph., Columbus.
Britton, John Carr, 1898, B. Sc. (Agr.), Columbus.
Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary surgeon.
Bronson, Herman S., 1897, LL. B. (B. L., Cornell University), Columbus, attorney.
Brophy, James Francis, 1899, E. M., Frostburg, Md.
Brown, Frank, 1899, M. A. (A. B., Macalester College), Columbus, teacher in High School.
Brown, Frederick W., 1888, E. M., Bellefontaine, superintendent Buckeye Portland Cement Co.
Brown, Newton H., 1893, M. E. in EE., Newark, Del., professor of Electrical Engineering, Delaware College.
Bruce, Charles A., 1895, B. A., Columbus, assistant professor of Romance Languages, State University.
Brumley, David Joseph, 1895, C. E., Evansville, Ind., with L. & N. Ry.
Bruning, Henry Dietrick, 1896, C. E., Pittsburg, Pa., engineer on P., C., C. & St. L. R. R.
Buckman, Arthur Leslie, 1897, M. E. in EE., Central Union Telephone Co., Toledo.
Buckman, Ola, 1895, B. Sc. (M. D., Cleveland University of Medicine and Surgery), Norwalk.
Bunnell, Larone A., 1898, G. Ph., Waynesville.

Burkett, Charles William, 1895, B. Sc. (Agr.), 1898, M. Sc. (Agr.), Durham, N. H., associate professor of Agriculture, New Hampshire State College.
Burkett, Dora Van Buren, 1897, B. Ph., Columbus.
Burns, James Ferguson, 1891, C. E., Hopkinsville, Ky., assistant engineer L. & N. Ry.
Burr, Harriett G., 1897, B. A., Worthington.
Butler, James Marion, 1894, LL. B. (A. B., Ohio Wesleyan University), Carmel.
Butterworth, William H., 1898, B. A., Columbus.
Bygate, Harry Goldsmith, 1899, M. E., Steubenville.
Byers, Clara, 1894, B. Ph., Mrs. Coles A. Raymond, Youngstown, O.

C

Cahen, Alfred, 1894, LL. B., Allegheny, Pa.
Calkins, George Herbert, 1895, M. E. in EE., with Gen. Electric Co. Testing Department, Schenectady, N. Y.
Calkins, William Bartlett, 1898, G. Ph., Columbus.
Callender, Sherman D., Ph. B. (Oberlin College), 1898, LL. B., 326-330, The Nasby, Toledo, attorney.
Canfield, Charles H., 1897, D. V. M., Akron.
Canfield, Dorothea Francis, 1899, B. Ph., graduate student, College de France, Paris.
Canfield, Leander Randall, 1896, B. Ph., Chardon.
Capron, Marshall Fremont, 1888, M. E., Kenton, architect.
Carr, Hugh Stanley, 1896, M. E. in EE., Sandusky, chief electrical engineer, Warren Electric Mfg. Co.
Carr, James Gray, 1897, B. A., Coshocton.
Carroll, Patrick Henry, 1894; E. M., Houtzdale, Pa.
Carroll, William Hunt, 1894, LL. B., Wilmington.
Carson, Samuel King, 1895, M. E. in EE., M. D. (Ohio Medical University), New York City.
Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant.
Catlin, Homer Clark, 1896, C. E., Toledo, Toledo Bridge Co.
Canaga, George Orlando, 1895, LL. B. (B. A., Scio College).
Cartwright, Henry Gilroy, 1895, LL. B.
Cellarius, Frederick Julius, 1888, C. E., Dayton, civil engineer.
Chamberlain, Helena, W., 1884, B. A., Mrs. Ellis Lovejoy, Union Furnace.
Chalmers, Agnes Florida, 1895, B. Ph., Bay City, Mich., teacher in High School.
Chappell, Walter Evans, 1898, M. E. in EE., first-class electrician, U. S. S. *Chicago*.
Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.
Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician.
Cilley, Raymond, 1896, C. E., Cincinnati.
Clark, Alexander B., A. B. (Yale University), 1899, LL. B., Canton.
Clark, Clarence J., 1899, C. E., Wilberforce.
Clawson, Clarence Alfred, 1899, B. Sc. (Agr.), Okena.
Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.
Claypoole, Bessie Smith, 1895, B. Ph., Columbus, student.
Claypool, Charlotte Lake, 1892, B. Ph., Columbus.
Clements, Frank Orville, 1899, M. Sc. (M. A., Otterbein University), Westerville.
Clum, George V., 1893, B. A., Mendota, Ill., president of Mendota College.
Clum, Harry Ernest, 1899, B. Ph., Westerville.

Cockins, Edith D., 1894, B. A., Columbus, registrar, State University.
Coddington, Edwin F., 1896, C. E., 1897, M. Sc., fellow in Astronomy, Lick Observatory, Mount Hamilton, California.
Cole, George Nathan, 1891, M. E. in EE., Chicago, Ill., 112 Clark street.
Cole, Marietta C., 1897, B. Ph., Columbus.
Collins, Curtis, 1895, M. E. in EE., Boston, Mass., engineer Meter Department General Electric Co.
Coney, William Hawks, 1894, B. Sc., Honolulu, S. I.
Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German.
Connell, William A., 1886, E. M., Kansas City, Mo., teacher Manual Training School.
Converse, Edward Joseph, 1886, B. A. (B. D., Yale University), Columbus, assistant pastor, First Congregational Church.
Converse, Howard Pendleton, 1887, B. Sc., 166 Devonshire street, Boston, Mass., manager Boston office Cooper, Hewitt & Co., steel and iron manufacturers.
Converse, Walter, 1899, B. A., Plain City.
Conway, Hugh Lawrence, 1896, C. E., Springfield.
Cope, Albert N., 1897, M. E. in EE., Columbus, foreman Columbus Street R. R.
Corner, Florence, 1897, B. Ph., Columbus.
Corns, Harry, 1897, B. A., Columbus, teacher in Central High School.
Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law.
Cotes, Albert E., 1897, B. Sc., Columbus, medical student, Ohio Medical University.
Coursalt, Ida May, 1899, B. Ph., Columbus.
Coursalt, Jessie H., 1893, B. A., 1898, M. A., Columbus, teacher in Central High School.
Covell, Vernon Royce, 1895, C. E., Pittsburg, Pa., county engineer's office.
Craig, Moses, 1889, B. Sc. (M. S., Cornell University, 1890), 1896, M. Sc. (H. & F.), Agricultural and Mechanical College, Corvallis, Oregon.
Cratty, John Mason, 1897, B. Sc., Cincinnati, chemist.
Crawford, Ira, Jr., 1893, LL. B. (B. S., Denison University), Dayton.
Crawford, William Sterling, 1888, B. Ph.
Cromley, Alva M., 1897, G. Ph., Toledo, pharmacist.
Crooks, Charles Melvis, 1892, B. A. (B. D., Harvard University, 1896), Colerain, Mass., pastor Congregational church.
Crowner, Delbert Alonzo, 1896, B. Sc. (Agr.).
Cummins, Henry Rollins, 1891, G. Ph., Hunter street, Columbus.
Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, book-keeper.
Cunningham, Edward Walter, 1894, C. E., 1718 Indiana avenue, Chicago, Ill., U. S. engineer's office.
Cunningham, George S., 1886, B. Ph., LL. B., Lancaster, attorney-at-law.
Cunningham, John Ferguson, 1897, B. Sc. (H. & F.), 1899, M. Sc. (H. & F.), Columbus, assistant in Horticulture, State University.
Curtis, Leigh Goodrich, 1899, C. E., Hamilton.

D

Daily, Henry G., 1892, D. V. M., Wooster, veterinary surgeon.
Dally, John Randolph, 1899, LL. B., Centerburg.
Damron, Carson W., 1897, M. E., Columbus, Jeffrey Mfg. Co.
Daniels, David Edwin, 1893, LL. B. (B. Ph., Denison University), 1896, I. I. M., Columbus.
Davenport, Adrian E., 1897, B. A., Columbus.

Davidson, David Millen, 1894, B. A.
Davidson, George Edwin, 1899, LL. B., East Liverpool.
Davies, Jennie C., 1897, B. Ph., Columbus.
Davies, John Lodwick, 1894, LL. B., Minneapolis, Minn., attorney-at-law.
Davis, Charles William, 1894, E. M., Colorado Springs, Col., teacher in High School.
Davis, Oscar Allen, 1897, M. E. in EE., Sistersville, W. Va., engineer, Carter Oil Co.
Deahl, Walter Smith, 1896, C. E., Pittsburg, Pa.
Deardurff, Carl Mason, 1895, B. A.
DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.
DeLoffre, Andre, 1896, M. E. in EE., Schenectady, N. Y., Engineering Department General Electric Co.
DeLoffre, Samuel Middleton, 1895, B. A.
Dennis, Jerry, 1892, LL. B., 1893, LL. M., Columbus, attorney-at-law.
Derby, Florence Harlow, 1896, B. Ph., Columbus, graduate student, State University.
Detmers, Fredericka, 1887, B. Sc., 1891, M. Sc., 1215 Neil avenue, Columbus, teacher.
Devol, William Stowe, 1886, B. Agr., Riverside, Cal.
Dice, Jesse Peck, 1898, LL. B., Akron.
Dickinson, Thomas Herbert, 1899, B. Ph., Columbus.
Diemer, Hugo, 1896, M. E. in EE., Norwood, Cincinnati, manager Cost Department Bullock Electric Co.
Dietrich, Charles Henry, 1878, B. Sc., with American Book Co., general manager for Kentucky.
Dietrich, George C., 1898, B. Ph., Groveport, Principal of High School.
Doan, Frank C., 1898, B. Ph., Boston, Mass., graduate, Harvard University.
Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Delaware, pastor M. E. church.
Donham Maurice, 1896, M. E., Buffalo, N. Y., Buffalo Forge Co.
Donham, William W., 1882, B. Sc.
Dresbach, Melvin, 1897, B. Sc., Columbus, fellow in Physiology, State University.
Dun, George William, 1884, B. Sc., Columbus, business manager "Columbus Citizen."
Dun, John J., 1883, E. M., Fifteenth avenue, Columbus, consulting engineer.
*Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.
Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.
Dunlap, Thaddeus Cox, 1895, M. E. in EE., consulting engineer, 8 W. Seventh street, Chattanooga, Tenn.
Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.
Dunnick, Edward, 1897, C. E., Columbus, New Columbus Bdg. Co.
Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta.
Dye, Clair Albert, 1891, G. Ph., student, in Germany.

E

Eagleson, Grace, 1897, B. Ph., Columbus.
Early, Franklin E., 1893, D. V. M.
Easterday, Charles Todd, 1891, G. Ph., Wellston, druggist.
Edwards, Mary Winifreda, 1897, B. A.
Egbert, Knott C., 1890, B. Agr., Yainax, Oregon, Supt. Indian Boarding School.
Eisenlohr, Berthold A., 1898, B. Ph., Cincinnati.

Ellis, Charles, 1898, D. V. M., 3230 Locust street, St. Louis, Mo., veterinarian.
Emery, Peyton Randolph, 1893, LL. B., London.
Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Cleveland, assistant professor of Latin, Western Reserve University.
Erf, Oscar, 1899, B. Sc. (Agr.), Monroeville.
Erskine, John H., 1886, E. M., Lowellsville, fire brick manufacturer.
Estep, Frank Leslie, 1898, M. E. in EE., Alliance, draughtsman, Morgan Engineering Co.
Evans, Ernest, 1892, B. Sc., Mingo Junction, chemist, Laughlin Junction Steel Co..
Evans, Peter Platter, 1892, C. E., Boston, Mass., with King Bridge Co.
Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., Colorado Springs, Col., teacher of chemistry in High School.
Eysenbach, Ernest E., 1896, E. M., Columbus, superintendent Columbus Gas Co.

F

Fairchild, Harmon Scott, 1894, LL. B., Springfield.
Farber, Charles Harker, 1894, B. A., Columbus, with State Savings Association
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., instructor in Climatology, Johns Hopkins University.
*Fay, Frederick Willis, 1882, B. A., B. Arch., died August, 1892.
Fay, Mona, 1897, B. Ph. (Mrs. Eugene Gee), Wheeling, W. Va.
Feicht, Russell Stimson, 1890, M. E. in EE., Engineering Department Westinghouse E. & M. Co., Pittsburg.
Feiel, Ida Louise, 1898, B. Ph., Columbus.
Fenner, Jessie Albertus, A. B. (Wittenberg College), 1898, LL. B., Shiloh.
Fergus, Guy Carlton, 1898, M. E. in EE., partner in Zanesville Electrical Co.
Fergus, John Franklin, 1892, LL. B., Columbus, attorney-at-law.
Finley, Harry Marshall, 1894, B. A., McConnellsville, principal of High School.
Fischer, Julius H. R. Paul, 1891, B. Agr., D. V. M., professor of Veterinary Medicine, Manhatten, Kas.
Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898, B. Sc., Columbus, fellow in Chemistry, State University.
Fischer, Walter, 1897, B. Sc., Columbus.
Fish, Fred Alan, 1898, M. E. in EE., Columbus, assistant in Electrical Engineering, State University.
Fisher, Clara, 1886, B. A., Mrs. J. Porter Milligan, Columbus.
Fisher, Georgietta, 1895, B. A., teacher in High School, Ottumwa, Iowa.
Fitzgibbon, James Robert, 1894, LL. B., Newark.
Fitterer, John Conrad, 1898, B. Sc., Butler.
Flickinger, George A., 1898, B. Sc. (Agr.), York.
Floto, Julius, 1889, E. M.
Flynn, Benjamin H., 1898, C. E., Columbus, with State Board of Health.
Flynn, Harry Franklin, 1892, C. E., Washington, D. C., U. S. Geodetic and Coast Survey.
Flynn, Maud, 1896, B. Sc., Columbus, student, Columbus Normal School.
Flynn, Oscar Rodgers, 1896, B. Sc., teacher in High School, Columbus.
Foley, William J., 1894, D. V. M., Lexington, Ky.
Ford, Ruth L., 1898, B. A., Ashtabula, teacher in High School.
Ford, Stanley Hamer, 1898, B. Ph., 1st Lieut. in U. S. Army.
*Forgy, Ralph Morris, 1896, B. Ph., died March, 1899.
Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning.

Foster, Frank McMillan, 1894, M. E. in EE., with John N. Poage, Cincinnati, manufacturer water columns and valves.
Foster, Israel Moore, 1898, LL. B., Athens.
Foulk, Charles William, 1894, B. A., student, in Germany.
Fowler, Harry R., 1894, M. E. in EE., Toledo, electrical contractor.
Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Columbus.
Fox, Frederick Hugh, 1896, B. Ph., McConnelsville.
Fox, John Herbert, 1897, M. E., Cleveland, Brown Hoisting Machine Co.
Francis, Edward, 1894, B. Sc., M. D. (Ohio Medical College), Washington, D. C.
Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of Veterinary Medicine, Agricultural and Mechanical College.
Frankenberg, John Theodore, 1899, M. E., in EE., Columbus.
Fravel, George B., 1888, M. E., Indianapolis, Ind., assistant Master Mechanic, Pan Handle shops.
Frayer, Lee Ambrose, 1896, M. E., Columbus, Columbus Machine Co.
Freeman, Stanton Sholes, 1898, E. M., Columbus.
French, Thomas Ewing, 1895, M. E., Columbus, assistant professor of drawing, State University.
Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.
Fulmer, Edward L., 1897, B. Sc., 1898, M. Sc., Mitchell, S. D., University of South Dakota.
Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.

G

Gains, Charles E., 1889, B. Ph., London, physician.
Galbraithe, John Howard, 1883, B. Ph., Oak street, Columbus, journalist.
Gale, Cora C., 1893, B. Ph., Columbus.
Gale, Franklin Henry, 1893, LL. M. (LL. B., University of Michigan), Columbus.
Gallen, William Francis, 1897, M. E., Columbus, Columbus Machine Co.
Game, Reed Haskell, 1896, B. Ph., 1899, LL. B., Columbus.
Gamper, Herman, 1899, M. E., Columbus.
Garber, Alberta D., 1889, B. Ph., A. M., Boston, Mass.
Garber, John Murray, 1897, C. E., Columbus, New Columbus Bdg. Co.
Garber, Levi L., 1898, B. A., Belleville.
Garst, William Augustus, A. B. (Otterbein University and Harvard University), 1898, LL. B., Westerville.
Gee, Eugene C., 1897, M. E. in EE., Wheeling, W. Va., with Telephone Co.
Gehrkens, Edward Frederick, 1894, M. E. in EE., Schenectady, N. Y., with General Electric Co.
Geissinger, James Allen, 1895, B. A., Cincinnati.
Genheimer, Eli Thomas, 1896, B. Ph., Portsmouth, teacher in High School.
Genheimer, William F., 1897, LL. B., Portsmouth, attorney.
Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.
Given, James Byron, 1896, M. E. in EE., 224, 22d street, Chicago, Ill., President Given Supply Co.
Givens, Newton Edgar, A. B., 1896, LL. B., Waverly.
Glover, Sioux, 1882, B. Sc., Mrs. Horton, Errid, Pa.
Goddard, Loring Hapgood, 1892, C. E., Sullivan, Ind., farmer.
Good, Paul Revere, 1899, B. A., Westerville.
Goodell, Ralph Spencer, 1892, C. E., Mt. Vernon, Mt. Vernon Bridge Co.
Goodman, Joseph Clarence, 1896, LL. M., Columbus.
Goodman, Sylvester Jacob, 1896, G. Ph., Columbus, student, Ohio Medical University.

Gordon, Adelaide Cummins, 1896, B. Ph., Columbus.
Graham, Emery Eugene, 1898, M. E. in EE., Alliance, Morgan Engineering Co.
Grandle, Frank Albert, 1891, G. Ph.
Grate, Charles Artemis, 1898, M. E., Akron, Adamson Machine Co.
Graves, William L., 1893, B. A., 1897, M. A., assistant professor in Rhetoric, State University.
Gray, Genevieve, 1898, B. Ph., Columbus.
Gray, James Collam, 1892, LL. B., 1893, LL. M., Pittsburg, Pa., attorney P. R. Ry.
Green, Charles C., 1885, B. Sc., M. D., Beaver City, Neb., physician.
Green, Jerome Joseph, 1893, M. E. in EE., Notre Dame, Ind., Notre Dame University, professor of Physics and Elec. Engineering.
Green, Joseph Fairst, 1899, M. E. in EE., Dayton.
Green, Robert Lee, 1892, G. Ph., New York City.
Gregg, Frank B., 1889, B. Ph., M. D.
Gregory, Hiram D., 1880, E. M., attorney-at-law, Grayson, Ky.
Griffin, Mark H., 1897, M. E. in EE., Xenia, electrical engineer, Soldiers' and Sailors' Orphans Home.
Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist.
Griffith, David Mathias, 1896, LL. B., Kecksburg, Pa.
Griffith, Wellington John, 1892, LL. B., Tiffin.
Griffiths, Benjamin Lincoln, 1898, LL. B., Vaughnsville.
Grimsley, George Perry, 1890, B. A., 1891, M. A. (Ph. D., Johns Hopkins University, 1894), Topeka, Kan., professor Natural History, Washburn College.
Griswold, Lawrence William, 1892, B. A., New York City, London Assurance Co.
Groff, Orsylla Ann, 1894, G. Ph., North High street, Columbus, pharmacist.
Groff, Warren Noble, 1896, B. A., 1899, LL. B., Tiffin.
Groves, John Wesley, 1898, C. E., Batavia.
Gruen, Francis William, 1899, B. Ph., 1899, LL. B., Cincinnati.
Guerin, Martha, 1896, B. Ph., Columbus.
Gugle, George Linville, 1896, LL. B., Columbus, attorney.
Gugle, Marie, 1897, B. A., Alexandria, Ind., teacher.
Guittard, Virgil, 1894, B. Sc., New Bedford.
Guitteau, William B., 1897, B. Ph., Toledo, teacher in High School.
Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

H

Haas, Frank, 1895, C. E., 1896, E. M., Columbus.
Hagler, Howard, 1889, B. Sc., Washington, C. H., farmer.
Haigler, Charles Edmund, 1898, B. Sc., Jeffersonville.
Hale, Frederick James, 1898, M. E., Columbus, fellow and laboratory assistant in Mechanical Engineering, State University.
Hall, Harry R., 1889, E. M., Dunbar, Pa., assistant general manager Dunbar Furnace Co.
Halterman, Oscar Elmore, 1895, LL. B., B. S. (National Normal University).
Hamilton, Charles R., 1893, B. A., Zanesville, Dun's Commercial Agency.
Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon.
Hammond, Bessie B., 1897, B. Ph., Columbus.
Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher.
Hancock, David R., 1889, G. Ph., M. D.
Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist.
Hannum, William Hamilton, 1897, B. A., Columbus.

Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.
Harlor, John David, 1895, B. A., Columbus, teacher in Central High School.
Harris, Charles Pearl, 1899, B. Ph., West Liberty.
Harris, Frank Laverne, 1894, LL. B. (Ph. B., Tri-State Normal University), Payne.
Harris, Walter Conger, 1893, B. Sc., 68 W. Thirty-fifth street, New York, with Art Department of Herald.
Harrison, Warner, 1892, LL. B., East Town street, Columbus, attorney and solicitor C., A. & C. Railway.
Harrison, Willian Henry, 1885, C. E., Anaconda, Montana.
Harrold, Ernst Ellwood, 1895, G. Ph., dispenser chemical store-room, State University.
Harrop, Herbert Bailey, 1898, B. Sc., Columbus.
Hartsough, William H., Jr., 1898, B. Ph., Columbus.
Hartwell, Arthur, 1888, M. E., Chicago, Ill., manager Chicago office Westinghouse E. & M. Co.
Hartwick, Louis M., 1897, M. E., Springfield, chief draughtsman for Foos Gas Engine Co.
Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., 1899, LL. B., Columbus.
Harvey, Emory Wayland, 1896, B. Ph., Cleveland, teacher.
Harvey, Florence Danford, 1898, B. Ph., Mt. Perry.
Harvey, Sherman Lee, 1896, G. Ph., Harrisburg.
Hassler, Robert Hanich, 1892, M. E. in EE., electrical engineer, Indiana Bicycle Co., Indianapolis, Ind.
Hastings, Edwin George, 1898, B. Sc., Madison, Wis., student, University of Wisconsin.
Hayes, Seth, 1892, B. Sc., Fremont, principal of High School.
Hayward, George E., 1893, C. E., New Philadelphia, engineer, C., L. E. & W. Ry.
Hazelton, Bird, 1898, B. Ph., New Straitsville.
Hazlett, Robert, Jr., 1887, C. E., Wheeling, W. Va., consulting engineer.
Heacock, William Preston, 1898, LL. B., Cardington.
Heath, Arthur T., 1887, G. Ph., Harbor, analytical chemist, consulting engineer and contractor.
Hebble, Charles Roy, 1896, M. E. in EE., Cincinnati, electrical engineer.
Hedges, Harry, 1888, B. A.
Heller, Albert Henry, 1890, C. E., Youngstown, Youngstown Bridge Co.
Henderson, Adelbert Andrew, 1898, C. E., Columbus, city engineer corps.
Henretta, Charles Michael, 1896, E. M., Buffalo, engineer J. W. Ellsworth Coal Co.
Herbert, Charles T., 1897, LL. B., Columbus, attorney.
Herms, Edith S., 1898, B. Ph., Portsmouth.
Herrick, Louise, 1893, B. A. (Mrs. Harry Abbott), Columbus.
Hertner, John H., 1899, M. E. in EE., Dayton.
Hess, Florence Louise, 1895, B. Ph., Columbus.
Hewitt, Strafford Reaves, 1898, M. E. in EE., Columbus Belting and Packing Co.
Hiatt, William Arthur, 1895, B. Ph., New York City, teacher in Stevens School, Hoboken, N. J.
Higbee, Charles E., 1883, B. Sc.
High, Odessa, 1896, B. A., West Jefferson.
Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.
Hill, I. T. Reynolds, 1896, B. Sc. (H. & F.), Berlin Heights.
Hine, James S., 1893, B. Sc., Columbus, assistant professor of Entomology, State University.

Hine, Lucius A., 1888, E. M., 140 50th street, Chicago, Ill., manufacturer of light casting, etc.
Hipple, John Merton, 1898, M. E. in EE., Turtle Creek, Pa., inspector Westinghouse E. & M. Co.
Hirsch, Gustav, 1897, M. E. in EE., Washington, 2d Lieut. U. S. N. Signal corps.
Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, N. Y.
Hoffman, Arthur Sullivant, 1897, B. A., Coshocton, teacher in High School.
Homan, Frank, 1895, C. E., New Straitsville, chief engineer, C. H. H. C. & I. Co.
Hood, Sherman, 1894, B. Sc., Meander, gardner.
Hoover, Frederic Roland, 1899, B. Ph., Columbus.
Hopkins, Charles Delnow, 1893, LL. B. (B. A., Ohio Wesleyan University), Athens.
Horton, Henry Pomeroy, 1889, B. Ph.
Houseman, Ruth U., 1897, B. Ph., Painesville, teacher in High School.
Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.
Hovey, Clark Samuel, B. A. (Buchtel College), 1898, LL. B., Akron.
Howald, Ferdinand, 1878, B. Sc., Rush Run, W. Va., manager of mining operations.
Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.
Howard, Curtis C., 1878, B. Sc., M. Sc., 115 Jefferson avenue, Columbus, professor of Chemistry in Starling Medical College.
Howard, Fanny Fern, 1896, B. A., Columbus.
Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney.
Howard, John Wilmot, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.
Howells, Thomas J., 1897, E. M., Martins Ferry.
Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Co.
Hughes, Raymond Mollyneaux, A. B. (Miami University), 1897, M. Sc., Miami University, professor of Chemistry.
Huddleson, Don Carlos, 1897, G. Ph., Columbus, assistant in Gymnasium, State University.
Huffman, Lillian Stuart, 1899, B. Ph., Columbus.
Huggins, Burch Delaplaine, 1899, B. Ph., Hillsboro.
Hull, Mary Louise, 1894, B. A. (Mrs. C. H. Farber), Columbus.
Humphrey, J. Scott, 1879, B. Sc., Findlay, civil engineer.
Humphreys, Leona, 1895, B. A., Plain City, teacher in High School.
Hunt, William Franklin, 1887, M. E., attorney-at-law, New York Life Building, St. Paul, Minn.
Huntington, Arthur, 1899, M. E., Columbus.
Huston, Charles H., 1897, LL. B. (B. S., Tri-State College, Ind.), Mansfield.
Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-law.
Hyle, Charles A., 1896, M. E. in EE., San Francisco, Weather Bureau.

I

Imes, Marion, 1899, B. Sc. (Agr.), Bashan.
Ingram, Imogene, 1897, B. Ph., Columbus.
Innis, Lyman H., 1893, B. A., 1895, LL. B., Columbus, attorney.
Ireland, Guy Llewellyn, 1895, M. E., Cincinnati.
Irvin, Chadwick H., 1897, M. E., Lima.

J

Jackson, Frank Pierce, 1892, LL. B., 1893, LL. M., Columbus, attorney.
James, Florence May, 1896, B. A. (Mrs. Oscar R. Flynn), Columbus.
Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University.
Jenkins, William B., 1893, C. E., Wilmington, Columbus and Athens Ry.
Jenkins, Willis H., 1894, C. E., New York City, engineer.
Jennings, Irvin G., 1899, LL. B., Zanesville.
Jennings, Levi E., 1897, M. E. in EE., Eaton.
Johnson, Charles W., 1896, M. E. in EE., Norwood, Cincinnati, chief draughtsman Bullock Electric Mfg. Co.
Johnson, George Edward, 1892, C. E., N. & W. Ry., Kenova, W. Va.
Johnson, Herbert Lincoln R., 1892, M. E. in EE., Cincinnati.
Johnston, Frederick Symmes, 1899, B. Sc. (Agr.), Durham, N. H., assistant in Agriculture, New Hampshire State College.
*Jones, A. A., 1886, C. E., died May, 1894.
Jones, Arthur James, 1898, M. E. in EE., Homestead, Pa., clerk, Carnegie Steel Works.
Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner Insurance Agency.
Jones, Alexander Houston, 1895, M. E. in EE., St. Louis, Mo., with B. J. Percival, engineer.
Jones, Benner, 1897, LL. B., Jackson.
Jones, Daniel D., 1893, G. Ph., Gallipolis, pharmacist, Epileptic Hospital.
Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chemist, William Cramp & Sons, ship-builders.
Jones, Paul, 1880, B. A., Columbus, attorney-at-law.
Jones, Pearl N., 1892, M. E. in EE., Pittsburg, Pa., engineer and salesman, Westinghouse E. & M. Co.
Jones, Smiley, 1894, E. M., Downieville, Cal., electrician, Gold Bluff mine.
Jones, William Francis, 1896, D. V. M., Cincinnati, Miami Medical College.
Judd, Horace, 1897, M. E., 1899, M. Sc., Columbus.
Judkins, Clyde H., 1897, LL. B. (A. B., Scio College), Flushing.
Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-law.

K

Keagle, Anna Brown, 1895, B. Ph., Columbus, teacher North High School.
Keating, David Thatcher, 1899, B. Ph., Columbus.
Keffer, Frederick, 1892, M. E., Anaconda, British Columbia, Supt. Boundary Creek Mining Co.
Keifer, William White, 1886, B. A. (LL. B., Cincinnati), Springfield, attorney-at-law.
Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., Columbus, assistant in Chemistry, Ohio Medical University.
Kellerman, Ivy, 1898, B. A., 1899, M. A. (Cornell University), Ithica, N. Y., student, Cornell University.
Kellicott, William E., 1898, B. Ph., Marysville, teacher in High School.
Kellison, Edward Lafayette, 1897, B. Ph., Columbus, student in College of Law, State University.
Kemmler, Edward A., 1888, C. E., 895 S. High street, Columbus, assistant city engineer.
Kerr, Samuel Thompson, 1894, M. E. in EE., Martin's Ferry, superintendent Municipal Electric Light Plant.

Kersey, William Rufus, 1899, M. A. (B. A., Earlham College), Columbus.
Kershaw, Francis Stewart, 1891, B. Ph., Boston, Mass.
Kershaw, Samuel Charles, 1892, B. Ph., Columbus, book-keeper, Columbus Bolt Works.
Kester, Fred. Edward, 1895, M. E. in EE., Columbus, assistant in Physics.
Kiesewetter, Louis Frank, 1891, C. E. (A. B., Harvard, '92, and A. M., '93), Columbus, assistant cashier Ohio National Bank.
Kiler, Abdel William, 1896, G. Ph., druggist, Columbus.
King, Robert James, 1899, B. A., Zanesville.
Kirby, Harriet R., 1898, B. A., Columbus, teacher in North High School.
Kirker, Harry L., 1889, B. Sc., Centreville, Idaho, electrician, Basic Co.
Kiser, Katherine Daniel, 1895, B. A., Chicago, principal High School.
Kline, Charles H., 1897, M. E. in EE., Dayton.
Knauss, William Henry, 1895, B. Sc., student, Starling Medical College.
Knecht, Arthur Edward, 1898, M. E., Cincinnati.
Knight, Ruby Ray, 1895, B. Sc., Middleport.
Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.
Knopf, George W., 1883, B. Sc., Pittsburg, Pa., bridge builder.
Kohr, Donald Alexis, 1898, B. Ph., Westerville.
Krauss, Bertha Katherine, 1892, B. Ph., Ottawa.
Kreiger, Charles Henry, 1887, G. Ph., Columbus, superintendent the Kauffman-Lattimer Co.
Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., Columbus, attorney.
Krumm, Herbert Zettler, 1898, B. Ph., Columbus.
Krumm, Lillian Louise, 1895, B. Ph. (Mrs. Harry Rush Wilson), Columbus.
Krumm, Louis Ralph, 1898, M. E. in EE., Engineering Department Central Union Telephone Co., Chicago, Ill.
Krupp, William Emil, 1899, LL. B., Uhrichsville.
Kuhn, Vallie Howard, 1896, M. E. in EE., Etna.
Kuhn, Harry Waldo, 1897, B. Sc., graduate student, Cornell University.

L

Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., engineer, Westinghouse E. & M. Co.
Lamme, Bertha A., 1893, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.
Landacre, Francis Leroy, 1895, B. A., assistant in Zoology and Entomology, State University.
Landacre, Walter Alexander, 1891, G. Ph., Columbus, with Braun & Sons.
Landis, Walter Victor Titus, 1895, B. Ph., Dayton.
Lane, Quinton R., 1898, B. Ph., Canal Winchester.
Large, Joseph H., 1890, C. E., Pittsburgh, Pa., assistant inspector of bridges, Pennsylvania Southwestern system.
Laughlin, Hugh Clarence, 1890, B. A. (A. M., 1895, University of Nebraska), 1712 Bathgate avenue, New York, teacher in High School for Boys and Girls.
Lavery, William F., 1890, D. V. M., veterinary surgeon, State University.
Lawrence, Arthur K., 1897, G. Ph., Columbus.
Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.
Lee, Edwin S., 1893, G. Ph., Columbus, druggist.
Lee, Robert M., 1897, M. E., Westinghouse Machine Co.
Leffler, Edward Victor, 1896, G. Ph., Leipsic.
Lehman, John Wesley, 1899, B. Ph., Canal Winchester.
Lemert, Helen Ora, 1894, B. A., Columbus, teacher High School.

Lentz, Alice B., 1897, B. Ph., Lloydsville.
Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.
Leonard, James Lincoln, 1893, LL. B. (B. S., Ohio Normal University), Welcome.
Levering, Orpheus D., 1893, M. E., Winchester, Mass., The McKay Metallic Fastening Association.
Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.
Lewis, Thomas K., 1894, B. Sc., Columbus, assistant in drawing, State University.
Lincoln, Paul Martyn, 1892, M. E. in EE., Niagara, N. Y., assistant superintendent Niagara Falls Power Co.
Lindo, William C., 1896, C. E., Cleveland, O., "Nickle Plate" R. R., engineer.
Linebaugh, Jesse J., 1899, M. E. in EE., Pleasant Corners.
Linson, Irvin, 1882, B. A.
Lisle, Dallas Gypsi, 1899, B. Ph., Columbus.
Lisle, Leslie Mae, 1899, B. Ph., Columbus.
Lisle, Leslie, Mac, 1899, B. Ph., Columbus.
Logan, Lavallette Lasea, 1896, E. M., Scranton, Pa., professor National Correspondence School.
Logsdon, Carey Ligonri, 1899, B. Ph., Columbus.
Logsdon, Clement Jay, 1898, G. Ph., Columbus.
Loomis, John Cooper, 1898, LL. B., Tiffin.
Lott, Charles Milford, 1895, M. E. in EE., Paulding, superintendent Electrical St. & Power Co.
Loveberry, Clarence, 1896, D. V. M., Minneapolis, Minn., government meat inspector.
Lovejoy, Ellis, 1885, E. M., Union Furnace, chemist and superintendent Columbus Brick and Terra Cotta Co.
Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Light Co.
Luce, George Ernest, 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus.
Luse, Clara E., 1897, B. Ph., Mrs. Herbert T. Scott, Columbus.
Lusk, William Vinton, 1893, D. V. M., Ft. Wingate, New Mexico, veterinary surgeon, Ind. cavalry.
Lydenberg, Walter B., 1898, B. A., Dayton.
Lynas, Caroline, 1898, B. A., Columbus.
Lynas, Charles E., 1898, B. A., Columbus.

M

Maag, Benjamin Franklin, 1899, M. Sc. (B. Ph., Wooster University), Mt. Eaton.
MacGuire, Charles White, 1895, G. Ph., Toledo, student Toledo Medical College.
Mackey, Ure LaVerne, 1893, M. E. in EE. (B. A., Wooster University).
Magly, Robert A., 1897, G. Ph., Columbus.
Magruder, Leonard Anthony, 1895, B. Ph., 1896, LL. M.
Maier, John Valentine, 1895, LL. B. (B. S., Northern Indiana Normal University).
Malone, William Ruskin, 1885, B. A., Toledo, with New York Life Insurance Co.
Manecke, Gilbert, 1897, LL. B., Fostoria.
Manley, Rush Emmett, 1894, M. E. in EE., manager of Exchange Central Union Telephone Co., Mt. Vernon.
Mann, Wilber Edwin, 1899, B. Ph., Morrisville.
Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of Science, Male High School.
Marquard, Frank Fred, B. L., 1896, C. E., Dayton.

Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney, Second Assistant Director of Law.
Martell, Leonard Roland, 1898, B. A., Columbus.
Martin, Edwin Dunlevy, 1891, B. Ph., Lee Centre, Ill., teacher.
Martin, George, 1897, M. E. in EE., Massillon, Central Union Telephone Co.
Martin, Percy, 1892, M. E. in EE., The Union Electric Co., 4 Frederick Wilhelm street, Berlin, Germany, electrical engineer.
Marvin, Charles Frederick, 1883, M. E., Washington, D. C., U. S. Weather Bureau.
Mason, George F., 1890, G. Ph., Minneapolis, Minn., pharmacist.
Masters, George Albert, 1886, C. E., Toledo.
Mathers, John Harrison, 1895, B. Ph., Conover.
Mathias, Frederick W., 1893, B. Sc., Toledo, teacher High School.
Matson, George H., 1882, G. Ph., 93 Lexington ave., Columbus, professor of Pharmacy, Ohio Medical University.
Matson, William Edgar, 1896, M. E. in EE., Lynn, Mass., with General Electric Co.
Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.
Mays, James Wesley, 1897, B. Ph., Columbus, student in College of Law, State University.
McAllen, William Johnson, 1894, C. E., Mt. Vernon, O., engineer.
McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., Columbus attorney.
McCarter, Flora, 1897, B. A., Columbus.
McCarter, Robert Dale, Jr., 1895, M. E. in EE., Berlin, Germany, representing General Electric Co.
McClelland, Chalmer Kirk, 1898, B. Sc. (Agr.), Andover.
McCormick, J. H., 1880, M. E., Dayton, National Cash Register Co.
McCormick, William Francis, 1896, M. E., Columbus.
McCulloch, George Elmer, 1891, B. Sc.
McDowell, John Andrew, 1882, B. Sc., 949 Neil ave., Columbus, cement engineer.
McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law.
McGregor, James Howard, 1894, B. Sc., New York, assistant in Zoology, Columbia University.
McGrew, John Alexander, 1895, C. E., Cleveland, engineer, with Pennsylvania Railroad Co.
McGuffey, Francis Hoyt, 1894, M. E. in EE., McGuffey, wholesale produce.
McIntire, Alfred Heber, 1898, M. E. in EE., Columbus, fellow in Industrial Arts, State University.
McLaughlin, Annis, 1897, B. Ph., Columbus.
McLaughlin, James Audley, 1895, LL. B. (B. A., Monmouth College).
*McMakin, Amasa Brown, 1879, B. Sc., died May 22, 1891.
McNary, George Bull, Jr., 1896, M. E. in EE., Toledo, with Bissel & Co.
McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., Columbus, State University, professor of Chemistry.
Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.
Mead, Rollo Nooman, 1895, D. V. M., Grand Rapids.
Mebs, George H., 1897, G. Ph., Columbus.
Meek, Charles Wesley, 1894, LL. B., Toledo.
Meek, Edward Duncan, 1896, B. A., 1899, M. A., Glencoe.
Meek, William W., 1889, B. Ph., 121 Fifteenth ave., Columbus, J. W. Meek & Co.
Mendenhall, Maurice H., 1893, D. V. M., West Elkton.
Menough, Arthur George, 1894, E. M., Wellsville.
Mercer, Frank Emmet, 1896, M. E. in EE., Wauseon.

Merrill, Alice Louise, 1893, B. A., 6565 Yale ave., Chicago, Ill., Station O. teacher.

Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.

Mershon, Ralph D., 1890, M. E., New York office Westinghouse E. & M. Co.

Mesloh, Charles W., 1889, B. A., 1895, M. A., assistant professor of German, State University.

*Metters, Allen, 1896, B. A., died January 22, 1898.

Metzger, Edward H., 1897, G. Ph., Circleville.

Mickey, Blanche D., 1898, B. Ph., Columbus.

Middleswart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Constitution.

Middleton, Ambrose, 1895, G. Ph., Lancaster.

Miller, Carl James, 1898, B. Sc. (Agr.), Franklin.

Miller, Charles C., 1883, B. A., Lima, superintendent schools.

Miller, Daniel Elmer, 1890, G. Ph., Dayton, druggist.

Miller, Frank Case, 1893, C. E., Columbus, assistant engineer C., S. & H., Short Line Division.

Miller, Harry Franklin, 1889, M. E., McKeesport, Pa., constructing engineer, National Tube Works.

Miller, Henry P., 1897, D. V. M., Sunbury.

Miller, Walter McNab, B. Sc., 1885, Reno, Nev., professor of Anatomy and Physiology, State University.

*Milligan, James Porter, 1886, B. A., died, February, 1899.

Mills, William C., 1898, B. Sc. (H. & F.), Columbus, curator Archæological collection, State University.

Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.

Mix, Edward W., 1888, B. Sc., Paris, France, superintendent "Le Societi des Establishments."

Mix, Melvin Noble, 1895, B. Ph., New York, The World, journalist.

Mock, George Herbert, 1891, B. Sc., Ohio State Savings Bank, Columbus.

Montgomery, Howard, 1896, B. Ph.

Moodie, Alice Haynes, 1890, B. A., Mrs. Arthur Hartwell, Chicago, Ill.

Mooney, Daniel Francis, 1894, LL. B., St. Mary's.

Moore, Henry Curtis, 1897, B. Sc., Washington C. H.

Moore, Virgil Owen, 1895, B. Sc., Columbus, student Starling Medical College.

Morhart, Katherine Elizabeth, 1893, B. Ph., Pomeroy.

Morrey, Annie Eliza, 1896, B. A., Chester Hill.

Morrey, Charles B., 1890, B. A., 1896, M. D., Columbus, assistant professor Physiology, State University.

Morrey, William T., 1888, B. A., New York City, teacher.

Morris, Clyde T., 1898, C. E., Columbus, New Columbus Bdg. Co.

Morrison, M. Frank, 1879, B. A., Mrs. S. H. Short, E. 9th ave., Cleveland.

Morrison, Robt. O., 1893, C. E., Cincinnati, engineer on Little Miami R. R.

Morton, George L., 1884, M. E. (LL. B., National Law School), chief examiner, patent office, Washington, D. C.

Moses, Martha Allston, 1891, B. Ph., 1111 Hinman ave., Evanston, Ill., bookkeeper.

Moss, Blanche, 1898, B. A., Columbus.

Moss, William, 1898, G. Ph., Buffalo.

Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Co.

Mull, Bert LaForrest, 1898, LL. B., Columbus.

Mullay, Annie, 1887, B. Ph., Chicago, teacher.

Mundhenk, Fred., 1896, B. Ph., Columbus, life insurance agent.
Mundhenk, Herbert C., 1899, B. Ph., Brookville.
Mundhenk, Ruth, 1899, B. Ph., Dayton.
Munn, Mortimer Adam, 1894, C. E., Springfield, engineer.
Munson, Theodore, 1898, B. Sc., Zanesville.
Murray, Claude R., 1895, B. A., Middleport, principal of High School.
Murray, Frank Erskine, 1892, D. V. M., Greenfield, veterinary surgeon.
Myers, Joseph Simmons, 1887, B. A., Pittsburg, Pa., editor Pittsburg Post.
Myers, Ord, 1895, M. E. in EE., inspector Metropolitan St. Ry. Co., New York.
Myers, Roy V., 1893, C. E., Dayton, Tenn., mining engineer.
Myers, Uriah H., 1887, E. M., Allegheny, Pa., chemist, Marshall Kennedy Milling Company.

N

Nagel, William G., 1895, M. E. in EE., Toledo, W. G. Nagel & Co., electrical supplies.
Needles, Mana R., 1890, B. Ph. (Mrs. Kilpatrick), Owosso, Mich.
Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina.
Newton, Henry S., 1889, B. Sc., Syracuse, N. Y., general manager Syracuse, Lakeside and Baldwinsville R'y.
Newton, Samuel Donald, 1895, C. E., engineer on Southern R. R.
Nichol, Gertrude Bell, 1899, B. Ph., Columbus.
Niewvahner, John Henry, 1891, B. A., Jackson, assistant cashier, First National Bank.
Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.
Nurian, Kerson, 1899, M. E., East Pittsburg, Pa.
Nutt, Arthur Chase, 1897, B. Ph., scholarship in Philosophy, Cornell University.

O

Obetz, Francis Henry, 1896, G. Ph., Columbus.
O'brine, David, 1881, B. Sc., M. Sc., E. M., D. Sc., M. D., Urbana, physician.
Odebrecht, August, 1895, G. Ph., Columbus, with H. Braun & Sons.
O'Kane, Sarah Eliza, 1891, B. Ph. (Mrs. F. M. Raymund), 215 W. Tenth ave., Columbus.
O'Kane, Walter Collins, 1897, B. A., Columbus, journalist.
Orton, Clara Gregory, 1897, B. Ph., Columbus.
Orton, Edward, Jr., 1894, E. M., Columbus, director of the department of Clay-working and Ceramics, State University.
Orton, Walter Edwin, 1899, LL. B., Williamstown, Mass.
Osborn, Samuel Galloway, 1897, LL. B., Columbus, attorney.
Osborn, Raymond Carroll, 1898, B. Sc., Columbus.
Ozias, Albert N., 1889, M. Sc., Racine, Wis., principal High School.

P

Pabodie, Robert Jewett, 1899, M. E., Wyoming.
Page, William Herbert, 1892, LL. B., 1894, LL. M. (B. A., Yale), Columbus, professor of Elementary Law, State University.
Palmer, Walter K., 1893, M. E., State University, Lawrence, Kas., professor of Mechanical Engineering.
Parker, John Bernard, 1898, B. A., Columbus, fellow in Rhetoric, State University.

Patch, Homer Austin, 1896, C. E., Youngstown Bdg. Co.
Patchell, Owen P., 1889, B. Ph., 'Ardmore, Ind., attorney-at-law.
Patchin, Rufus Harry, 1898, LL. B., Chardon, attorney-at-law.
Payne, Halbert Edwin, 1887, M. E., 256 Broadway, New York City, American Typewriter Co.
Peal, Allen Saunders, 1895, B. A., Chicago, Ill.
Pearce, George Downer, 1892, G. Ph., Goshen, Ind., pharmacist.
Pearl, Allen Sexton, 1894, M. E. in EE., Chicago, Ill., salesman, Central Electric Company.
Pease, Edward Livingstone, 1895, B. A., 1899, LL. B., Columbus.
Pedlow, Edward Benjamin, 1893, C. E., New Straitsville, superintendent, Columbus and Hocking Coal and Iron Co.
Peppel, Samuel Vernon, 1899, B. Sc. (Chem.), Leetonia.
Pence, David Arrel, 1894, M. E., Lowellville.
Perkins, Earl Harley, 1893, LL. B., Wellington.
Peters, William Lincoln, 1885, M. E., Riverside, Cal., manufacturer.
Pfarr, Philip Lewis, 1896, B. Sc. (Agr.), Dennison, Iowa.
Phelps, Cyrus Alba, 1892, B. Sc., Sombereto, Jacataccas, Mexico, with Sombereto Mining and Milling Co.
Pierce, John Mattison, 1895, M. E. in EE., South Charleston.
Pilcher, Hastings Moore, 1895, M. E. in EE.
Plantz, Wyatt Garfield, 1894, B. A., Pomeroy.
Pleukharp, Chas. V., 1885, M. E.
Plimmer, Gertrude Alice, 1896, B. Ph., Columbus.
Polk, Walter C., 1895, C. E., Indianapolis, Ind., assistant general foreman, Central Union Telephone Co.
Pomerene, Frank Etherington, 1891, B. Ph., 1895, LL. B., Coshocton, attorney-at-law.
Pool, Harwood Redington, 1881, B. Ph., LL. B., 62 Cedar street, New York City.
Porter, Mary Baxter, 1897, B. Ph., Columbus.
Postle, Herman R., 1894, C. E., Columbus, teacher.
Postle, Kenneth F., 1894, B. A., Lancaster, Ky., teacher.
Powell, Chas. S., 1893, M. E. in EE., Cleveland, representing Westinghouse E. & M. Co.
Powell, Edward Thompson, 1896, LL. B., Columbus, attorney.
Powell, Norman Clemson, 1895, D. V. M., Damascus.
Prall, Anna Dickson, 1898, B. A., Columbus.
Price, Homer Charles, 1897, B. Sc. (Agr.), Newark, farmer.
Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.
Pryor, Charles Foster, 1898, LL. B., Columbus.
Pugh, Lawrence Randloph Whetzel, 1893, B. Ph., 1895, LL. B., Columbus, attorney-at-law.
Pumphrey, John Homer, 1898, B. Sc., Clayton.
Putnam, Abbey Slocum, 1897, B. Ph., Fisher, Ill.

R

Radcliff, Charles Anson, 1895, B. Ph., attorney, Jackson.
Randall, Emilius Oviatt, 1892, LL. M. (B. Ph., Cornell University), Columbus, attorney-at-law, professor in Law School, State University.
Randolph, Edward S., 1897, LL. B. (A. B., Ohio Wesleyan University), Somerset.
Rane, Frank William, 1891, B. Agr. (1892, M. Sc., Cornell), Durham, N. H., professor of Agriculture and Horticulture, New Hampshire College.

Rarick, Murray M., 1896, B. Sc. (Agr.), Columbus, student, Starling Medical College.
Rasor, Samuel Eugene, 1898, B. Sc.
Rawson, Levi, 1899, C. E., Lisbon.
Ray, Frank A., 1887, E. M., Columbus, associate professor of mine engineering, State University.
Ray, William M., 1893, C. E., room 825, Hickox Building, Cleveland, C. L. & W. R. R.
Raymond, Coles Abel, 1894, C. E., Youngstown, Youngstown Bdg. Co.
Raymond, Frank M., 1888, B. A., Columbus, attorney-at-law.
Raymond, Maud, 1899, B. Ph., Columbus.
Redick, Mary Glisson, 1898, B. Ph., Findlay.
Reed, Robert Browning, 1896, M. E. in EE., Zanesville, electrical contractor.
Reed, William Allen, 1897, E. M., Central City, Colo., assaying officers, Alsdorf & Paul.
Reese, William Daniel, 1891, B. A.
Reese, William Henry, 1896, G. Ph., Glen Roy.
Reeves, Archibald C., 1887, C. E., 153 Superior ave., Dayton, civil engineer.
Resler, Edwin D. (B. A., Otterbein), 1897, M. A., Westerville.
Rice, Herbert A., 1897, C. E., Columbus, with Yost & Packard, architect.
Rice, Mabel Elise, 1898, B. A., Columbus, student.
Rice, Susan Esther, 1899, B. A., Columbus.
Richardson, Hamilton Hutchinson, 1892, B. Agr., Brooklyn, gardener.
Richardson, William Waddle, 1899, B. Ph., Massillon.
Richey, Luzerne A., 1897, B. Ph., Denver, Col., attorney.
Rickey, Alla B., 1889, B. Ph. (Mrs. Geo. H. Cless), Broad street, Columbus.
Riddle, Howard Sterling, 1897, M. E. in EE., Columbus, Jeffrey Mfg. Co.
Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Columbus.
Rietz, Henry Lewis, 1899, B. Ph., Gilmore.
Riggs, Ernest Jacob, 1895, B. Sc. (Agr.), M. Sc. (H. & F.), Angola.
Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, teacher in High School and fellow and assistant in American History, State University.
Ritchey, Joseph C., 1890, B. Sc., Mingo Junction, with Junction Iron and Steel Co.
Roach, Simeon Andrew, 1899, B. Ph., Chillicothe.
Robbins, George A., 1899, B. Ph., Columbus.
Roberts, Cyrus Swan, 1898, E. M., San Lui Potosi, Mexico, with the Cia Metaturica Mexicana.
Robinson, Eckla Mazola, 1892, B. Sc. (Mrs. George Rowe).
Robinson, Erdis Geroska, 1893, C. E., Mexico, D. F., Mexico, Engineering Department of Mexican Central Railway.
Robinson, Zella Vina, 1898, B. Ph., Columbus.
Rockwell, Mary Fannie, 1899, B. Ph., Columbus.
Rogers, Andrews, 1896, B. Ph., New York City, student, College of Physicians and Surgeons.
Rogers, Frank Persons, 1899, B. A., Columbus.
Rogers, James Bertrand, 1896, E. M., Steubenville, National Steel Co., Mingo Junction.
Root, Willis J., 1885, E. M., Columbus, chemist, King, Gilbert & Warren Steel Co.
Rowlee, Henry A., 1897, M. E., Columbus, inspector Ordnance Department U. S. A.
Ruhlen, Carl Marble, 1898, M. E., Honolulu, S. I., Quartermaster's Department U. S. A.
Ruhlen, Frank, 1896, B. Sc. (Agr.), Columbus, assistant in Agriculture, State University.

Rule, Ralph R., 1897, LL. B. (B. S., Tri-State College, Ind.), Greenspring.
Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School.
Russell, Ralston, 1896, B. Ph., Pomeroy.

S

Sabine, Annie Ware, 1884, B. A., A. M. (Mrs. W. H. Seibert), Columbus.
Sabine, Wallace Clement, 1886, B. A. (M. A., Harvard), 53 Trowbridge street, Cambridge, Mass., assistant professor in Physics, Harvard University.
Safford, Robert Edwin, 1894, B. Sc., Columbus, with Columbus Savings Association.
Sandoe, Lydora Olivia, 1893, LL. B., Mrs. Bachman, 1425 Bryden Road, Columbus.
Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., Columbus, attorney.
Schaub, Edward Louis Tascher, 1885, M. E., Dennison, Box 625, with P., C. & St. L. R. R.
Schaup, Charles E., 1897, E. M., Syracuse, N. Y., assistant engineer, maintenance of way, West Shore R. R.
Scheibell, William O., 1888, E. M., Upper Sandusky, manufacturer artificial stone.
Schlesinger, Hugo Nathan, 1899, LL. B., Xenia.
Schreiber, John Martin, 1899, M. E. in EE., Ironton.
Schroll, Otto, 1886, C. E., Wheeling, W. Va., civil engineer.
Schueller, Erwin Waldemar, 1892, B. A., M. D., 1894, Columbus, physician.
Schwier, Minona, 1897, B. A., Columbus.
Scott, Anna Neill, 1886, B. A., 1274 Summit street, Columbus.
Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.
Scott, Herbert, 1893, B. Sc., Columbus, pastor North M. E. Church.
Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., chief electrician Westinghouse E. & M. Co.
Scott, Daisy Medill, 1887, B. A., Columbus, teacher in High School.
Scott, Emma, 1888, B. Sc., Brindaban, India Missionary.
Scott, Ernest, 1897, B. Sc. (Agr.), Columbus, student, Ohio Medical University.
Scott, Mary Odella, 1885, B. A., Columbus, teacher in High School.
Scott, May Mermon, 1887, B. A., 1274 Summit street, Columbus.
Scott, Mary Bole, 1896, B. A., Columbus, teacher.
Sears, Walter James, 1894, B. Ph., Chillicothe, with Sears and Nichols Co.
Sedgwick, Edward Crayton, 1895, M. E. in EE., Zanesville.
Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist, Ohio Experiment Station.
Sellenings, Albert Eugene, 1896, B. Ph., student, Bellevue Medical College, New York.
Serva, Adam A., 1893, M. E. in EE., New York City, with General Electric Co.
Shark, Robert J., 1897, LL. B., Hamilton.
Sharp, Charles C., 1888, C. E., Corning, superintendent Mining Department Sunday Creek Coal Co.
Sharp, David Barton, 1893, LL. B., Columbus.
Shellabarger, Marley Rolin, 1897, B. Sc. (Agr.), Garland.
*Shepard, Frank Reed, 1893, B. A., died August, 1893.
Sherman, Christopher Elias, 1894, C. E., Columbus, assistant professor in Civil Engineering, State University.
Shield, Wallace B., 1898, B. A., Kansas City, Mo.
Short, Sidney H., 1880, B. Sc., East Ninth avenue, Cleveland.
Shuck, Carey Lucas, 1898, B. Ph., Columbus, "Columbus Evening Dispatch."

Shurtz, Olive L., 1898, B. Ph., Columbus.
Siebert, Wilbur H., 1888, B. A. (M. A., Harvard), Columbus, associate professor History, State University.
Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D. (Johns Hopkins University), Minneapolis, Minn., assistant professor of Animal Biology, University of Minnesota.
Sigerfoos, Edward, 1891, B. Ph., Fort McPherson, Georgia, 1st Lieut. Fifth Infantry, U. S. Army.
Simonton, Mark, 1895, M. E. in EE., Columbus.
Simpson, Abigail Ellen, 1895, B. A., London, teacher in High School.
Sinks, Frederick Nicholas, Ph. L. (Yale University), 1898, LL. B., Columbus.
Skinner, Chas. E., 1890, M. E., box 435, Wilkinsburg, Pa., Westinghouse E. & M. Co.
Slater, Burr Homer, 1895, G. Ph., Chesterville, pharmacist.
Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.
Smith, Alice May, 1897, B. Ph., Sidney, teacher.
Smith, Burton Griffin, 1895, G. Ph., Detroit, Mich., chemist for the Ray Chemical Co.
Smith, Carl Clyde, 1890, B. Ph., Marietta.
Smith, Clarence Elmer, 1898, G. Ph., Massillon.
Smith, David William, 1899, C. E., Ashland.
Smith, Edward E., 1897, G. Ph., Wooster.
Smith, Edward Trevett, 1898, LL. B., Holden, Mo.
Smith, Florizel, 1880; B. A., Spahr Building, Columbus, attorney-at-law.
Smith, Horace Prescott, 1886, B. Sc.
Smith, Maud Virginia, 1894, B. A. (Mrs. Thomas Chalmers), Port Huron, Mich.
Smith, Myron Alphonso, 1892, B. Ph., Columbus, with Keyes & Thomas, real estate agents.
Smith, Nathaniel B., 1893, D. V. M.
Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.
Smith, Warren Lee, 1899, LL. B., Columbus.
Snider, Charles M., 1897, B. Sc. (Ind. Arts), Columbus.
Snider, Jesse Worthington, 1893, LL. B., LL. M., Columbus.
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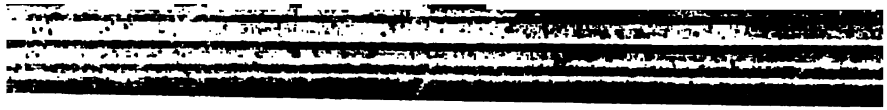
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INDEX

PAGE

Academic Year, the..... 49
Admission, examinations for..... 55
methods of 55
Admission to advanced standing..... 56
College of Agriculture.....59, 60
College of Arts, Philosophy and Science 68
College of Engineering..... 84
College of Law.....99-101
College of Pharmacy..... 107
College of Veterinary Medicine. 111
Course in Arts..... 68
Course in Commerce and Administration 70
Course in Dairying..... 65
Course Preparatory to Law and Journalism 81
Course Preparatory to Medicine 83
Course in Science..... 70
English Course in Philosophy.. 69
General statement as to..... 55
Graduate work 56
Latin Course in Philosophy.... 69
Modern Language Course in Philosophy 69
Short Course in Agriculture.... 65
Short Course in Ceramics..... 96
Short Course in Domestic Economy 65
Short Course in Industrial arts. 96
Short Course in Mining..... 96
Short Course in Pharmacy..... 110
Special Studies..... 55
Advanced Standing, admission to..... 56
Agricultural Chemistry, department location 33
Work in — described..... 120
Agriculture, College of — admission.....59, 60
Museum 44
Department of — equipment.. 34
Free scholarship in..... 50
Outline of Course.....61, 62
Outline of Short Course..... 66
Short Course, admission.... 65
Short Course in..... 66
Work in, described..... 119, 120
Alumni Association, officers of..... 198
Alumni, Directory of..... 195
American History, work in described..140, 142
Anatomy and Physiology, equipment..... 41
work in — described.....120, 121
Ancient Art, work in — described..... 140
Announcements 5

PAGE

Apparatus and Laboratories, described...34-43
Archaeology, Museum collections of..... 45
Architecture — equipment 35
outline of Course..... 96
work in — described..... 131
Armory and Gymnasium, described..... 33
Art, Ancient, work in — described..... 140
Arts, Course in — admission..... 68
outlined 71
Astronomical Observatory, described..... 32
Astronomy, work in — described..... 122
Attendance, see Enrollment.
Auditor's Fee..... 50

Biological Hall, described..... 33
Boarding expenses..... 51
Board of Trustees..... 6
Botanical Hall, described..... 31
Botany, department of — equipment..... 35
museum 44
work in described.....122, 123
Buildings, described.....31-34

Cadet Service, required — *Note*..... 61
Cadet uniform, expense of..... 51
Calendar 3
Ceramics, *see* Clay-working and Ceramics.
Chemical Hall, described..... 31
work in, described..... 120
Chemistry — Agr'l — department location.. 33
Chemistry, Special Course in..... 94
department of — equipment... 35
work in — described.....123, 125
Christian Association, Young Men's..... 46
Civil Engineering, department equipment. 36
outline of Course..... 86
work in—described.125, 126
Clay-working and Ceramics, admission.... 84
Short Course..... 96
Course in — outlined..... 91
department of — location.... 32
equipment 36
outline of Short Course..... 97
work in — described.....126, 128
Co-education, provided 55
College of Agriculture, admission.....59-60
Arts, Philosophy and Science — admission..... 68
Engineering — admission..... 84
Short Courses..... 96
Law — detailed statement of.....99-106
Pharmacy, admission..... 107
Veterinary Medicine—admission... 111
Colleges, other students from..... 56

PAGE

Colleges, the 30
Columbus High Schools as preparatory schools — *See* Note, p. 56, and elsewhere.
Committees of Board of Trustees..... 6
Course in Agriculture, outlined.....61–62
Architecture, outlined..... 95
Arts, admission 68
Arts, outlined 71
Chemistry 94
Civil Engineering — outlined.... 86
Clay-working and Ceramics — outlined 91
Commerce and Administration—outlined 77
Dairying — outlined..... 66
Domestic Economy — outlined.. 64
Electrical Engineering — outlined 90
General Science — outlined..... 79
Horticulture and Forestry—outlined 62–63
Industrial Arts — outlined..... 93
Law — outlined.....101, 102
Mechanical Engineering — outlined 88
Mine Engineering — outlined... 87
Pharmacy — outlined..... 108
Philosophy, English — outlined 76
Latin — outlined... 73
Modern Language. 74
Science, admission..... 70
Veterinary Medicine—outlined.. 111
Preparatory to Law and to Journalism — admission..... 81
outlined 81
Preparatory to Medicine—outlined 83

Dairying, Course in — admission..... 65
outlined 66
Days and Dates..... 5
Degrees, Bachelor of Laws..... 104
described 30, 56
Doctor of Philosophy..... 57
Doctor of Science..... 57
Masters' degrees..... 56
Master of Laws..... 56
Departments, work of — described..... 119
Doctor of Philosophy..... 57
Doctor of Science..... 57
Domestic Economy—department of—equipment 36
free Scholarship in.. 50
outline of Course.... 64
outline of S't Course. 67
Short Course—admission 65
Short Course in..... 67
Work in, described 128, 129
Dormitory expenses..... 51
Dormitory, North — described..... 34
Dormitory, South — described..... 34
Drawing, department of — equipment..... 37
work in — described.....129, 131

Economics — Special Library..... 46
Economics and Sociology — equipment.... 37

PAGE

Economics, work in — described.....132, 133
Education, work in — described.....133, 135
Education, State System of..... 29
Elective Studies, rules concerning — *See* at close of each four years' Course.....
Electrical Engineering, Course in — outlined 90
equipment 37
work in—described 135
Electrical Hall, described..... 31
Emerson McMillin Observatory, described 32
Employment, for students..... 52
Engineering, Civil — outline of Course.... 86
work in — described.....125, 126
College of — admission..... 94
College of — Short Courses.. 96
Electrical—outline of Course 90
Electrical, work in — described 135
Mechanical — outline of Course 88
Mechanical — work in — described 148, 149
Mine — outline of Course... 87
Mine, work in — described 150, 151
English Course in Philosophy, admission. 69
outlined... 76
English Language, work in — described 156, 157
English Literature, work in — described 135, 137
Enrollment 164
Entomology, work in — described.....161, 162
equipment 45
Entrance examinations, dates..... 55
Equipment and Laboratories, described..34–43
Ethics — *See* Philosophy, work described.
European History, work in—described.140, 142
Executive Department, roster of..... 23
Expenses 49–51
estimated 51

Faculties, changes in — 1899–1900..... 21
Faculties, changes in titles 1899–1900..... 22
Faculties, Members of..... 9
Fees 49–50
Fees — Auditor's..... 50
Fees, College of Law..... 51
Fellowships 57
Forestry Bureau 48
Free Scholarships 50
French — *See* Romance Languages.

Geology, department of — equipment..... 38
Museum..... 43
work in — described.....137, 138
German, work in — described.....138, 139
Graduate work..... 56
Graduation Fee..... 50
Greek, work in — described..... 140
Gymnasium and Armory, described..... 33

Hayes Hall, described..... 32

Higher Degrees..... 56
High School graduates, how recognized... 55

PAGE
History, work in described.....140, 142
and Political Science, work in — described 154, 155
Horse-shoeing, instruction in..... 161
Horticultural Hall — described..... 32
Horticulture and Forestry — equipment.... 38
outline of Course 62-63
Horticulture, work in — described.....142, 143
Hospital, Veterinary 32

Incidental Fees 49
Industrial Arts, admission to Short Course 96
outline of Course..... 93
outline of Short Course... 96
Industrial Arts and Shopwork, work in — described 143, 145
Instruction, Courses of — *See* the Colleges, and Departments.
Italian — *See* Romance Languages.

Journalism, outline of Course preparatory to 81

King's Daughters..... 46

Laboratories and equipment, described...34-43
Laboratory Fees 49-50
Labor, for self-support..... 52
Lake Laboratory, the..... 43
Latin Course in Philosophy — admission.. 69
outlined.... 73
Latin, work in — described.....145, 146
Law, College of — detailed statement...99-106
Course preparatory to — outlined.. 81
Fees 51, 106
Libraries 105
outline of Course in.....101-102
work in — described..... 146
Libraries 45
Libraries, Law 105
Literary and other Societies..... 46
Living expenses 51
Location of University..... 30
Logic — *See* Philosophy, work described.

Major Study — required — *See* note, page 72, and elsewhere.
Master's degree..... 56
Mathematics, work in — described.....147-148
Matriculation — *See* Entrance Requirements, Admission, etc.
Mechanical Engineering, equipment..... 38
outline of Course..... 88
work in — described..148, 149
Mechanical Hall, described..... 31
Medicine, outline of Course preparatory to 83
Members of the Faculties, and other Instructors 9
Metallurgy — equipment 30
and Mineralogy, work in — described 149, 150
Military Science — required..... 47
Military Science, work in — described.... 150

PAGE
Mine Engineering, department of—location 31
equipment 39
outline of Course..... 87
work in—described.150, 151
Mineralogy, work in — described.....149, 150
Mining, admission to Short Course..... 96
outline of Short Course..... 97
Modern Language Course in Philosophy — admission 69
outline of..... 74
Moral and Religious culture..... 46
Museums, the 43-45

North Dormitory, described..... 34

Observatory, Astronomical, described.... 32
Officers of the Board of Trustees..... 6
Ohio Forestry Bureau..... 48
Organization of University..... 30
Orton Hall, described..... 32

Pedagogy — *See* Education.
Pharmacy, admission to College of..... 107
department of — equipment..... 40
department of — location..... 31
outline of Course.....108-109
outline of Short Course..... 110
work in — described.....151, 152
Philosophy, work in — described..... 152
Photography, *See* Drawing, work described.
Physical Training..... 48
Physical Training, required — *Note*..... 61
Physics, department of — equipment..... 40
work in — described.....153, 154
Physiology, department of — equipment... 41
work in — described.....120, 121
Political Science, work in—described..154, 155
Prizes 58
Psychology and Education — equipment... 41
Public Education, State system of..... 29

Registration — *See* Fees.
Religious Organizations..... 46
Requirements for admission — *See* admission.
Residences, described..... 34
Rhetoric and English Language, work in— described 155, 158
Romance Languages, work in — described 158, 160

Scholarships, Free..... 50
Science Course, admission..... 70
Science, general outline of Course in..... 79
Self-Support 52
Shopwork — equipment 42
work in — described.....143, 145
Short Courses — Agriculture..... 66
Clay-working and Ceramics — outlined..... 97
College of Engineering.. 96
Domestic Economy..... 67
Industrial Arts—outlined 98

PAGE

Short Courses — Mining — outlined..... 96
Pharmacy — admission .. 110
outlined..... 110
Special Studies, admission to..... 55
Societies, Literary and other..... 46
Sociology and Economics — equipment.... 37
South Dormitory, described..... 34
State System of Education..... 29
Students, names, records, etc..... 164
Summer School 112
Summer Library School..... 116

Teacher's Certificates, available for entrance 55
Terms and Vacations..... 49
Titles of Professors, Changes in..... 22
Townshend Hall, described..... 32
Trustees, Board of..... 6
Committees of Board..... 6
Officers of Board..... 6

Uniform, cadet — cost of..... 51
University Addresses..... 24
University Hall, described..... 31

PAGE

University, buildings of..... 31
location of 30
organization of 30
the — and the State..... 29

Vacations 49
Veterinary Hospital, described..... 32
Veterinary Medicine, admission to College of 111
equipment 42
free scholarship in.. 50
outline of Course in. 111
work in, described 160, 161

Women admitted as students..... 55
Work, for students..... 52

Y. M. C. A..... 46

Zoology, department of — Museum..... 44
and Entomology — equipment... 43
and Entomology — Special Library 46
work in, described.....161, 162

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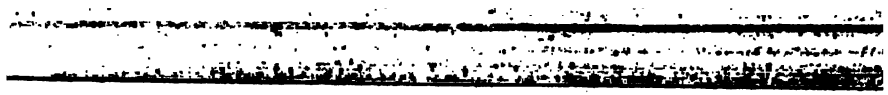
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* Died October 16, 1899.

ALLEN CAMPBELL BARROWS,
Professor of English Literature and Dean of the College of Arts, Philosophy and Science — 85 West Tenth avenue.

EDWARD ORTON, JR.,
Director of the the Department of Clay Working and Ceramics — The Normandie.

WILLIAM FOREST HUNTER,
Dean of the College of Law; Professor of the Law of Sales, Bailments, Evidence, Wills, Construction of Contracts, Law of Corporations; Judge of Moot Courts — 1802 Bryden Road; 18 Board of Trade.

DAVID FRANKLIN PUGH,
Professor of Equity Jurisprudence and Law of Real Property — 1820 Highland street.

JAMES HENRY COLLINS,
Lecturer on Federal Practice — 57 Lexington avenue; Ruggery Building.

EMILIUS OVIATT RANDALL,
Professor of Commercial Law — 1025 Oak street; Supreme Court Room.

WILLIAM THOMAS MAGRUDER,
Professor of Mechanical Engineering — 191 King avenue.

J. P. GORDY,
Professor of Pedagogy — 350 West Seventh avenue.

EDGAR BENTON KINKEAD,
Professor of the Law of Pleading and Practice, Torts, and of Criminal Law — Wyandotte avenue; Board of Trade.

WILLIAM HERBERT PAGE,
Professor of Elementary Law — 527 East Broad street; 27 Board of Trade.

WM. McPHERSON, JR.,
Professor of Chemistry — 97 Hamilton avenue.

JOSEPH NELSON BRADFORD,
Professor of Drawing — 54 West Tenth avenue.

DAVID STUART WHITE,
Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine — West Fifth avenue.

HERBERT OSBORN,
Professor of Zoology and Entomology — 485 King avenue.

CLARENCE P. LINHART,
Professor of Physical Education, and Director of the Gymnasium — The Vendome.

JAMES MADISON BURNS, U. S. A.,
Professor of Military Science and Tactics — The Columbus Club.

OLIVE BRANCHE JONES,
Librarian — 53 Eleventh avenue.

HENRY CURWIN LORD,
Dircetor of the Emerson McMillen Observatory and Associate Professor of Astronomy — Observatory Park.

FRANK EDWIN SANBORN,
Director of the Department of Industrial Arts — 380 West Eighth avenue.

FRANK ARNOLD RAY,
Associate Professor of Mine Engineering — 137 King avenue.

EMBURY ASBURY HITCHCOCK,
Associate Professor of Experimental Engineering — 380 West Eighth avenue.

FRANCIS CARY CALDWELL,
Associate Professor of Electrical Engineering — 401 Sixth avenue.

PERLA G. BOWMAN,
Associate Professor of Domestic Science — The Saint Anna.

FREDERICK CONVERSE CLARK,
Associate Professor of Economics and Sociology — 1684 Neil avenue.

WILBUR HENRY SIEBERT,
Associate Professor of History — 1382 Highland street.

WILLIAM DAVID GIBBS,
Associate Professor of Agriculture — 234 West Tenth avenue.

STELLA ELLIOTT CANFIELD,
Associate Professor of Physical Education — 1457 Worthington street.

GEORGE WASHINGTON McCOARD,
Associate Professor of Mathematics — 325 West Sixth avenue.

CHARLES WALTER MESLOH.
Associate Professor of German — University Grounds.

ARTHUR WINFRED HODGMAN,
Associate Professor of Classic Languages — 164 West Ninth avenue.

CHARLES SMITH PROSSER,
Associate Professor of Historical Geology — 1362 Highland street.

JOHN ADAMS BOWNOCKER,
Associate Professor of Inorganic Geology — 1594 Neil avenue.

JOHN WRIGHT DECKER,
Associate Professor of Dairying — 329 West Eighth avenue.

JOHN A. SHAUCK,
Lecturer on Supreme Court Practice, Special Cases, etc. — 95 Winner avenue.

J. WARREN SMITH,
Lecturer on Meteorology — 55 Cleveland avenue.

JAMES ELLSWORTH BOYD,
Assistant Professor of Physics — 25 Maynard avenue.

JOSEPH RUSSELL TAYLOR,
Assistant Professor of Rhetoric — corner King and Worthington.

CHRISTOPHER ELIAS SHERMAN,
Assistant Professor of Civil Engineering — 772 Oak street.

WILLIAM LUCIUS GRAVES,
Assistant Professor of Rhetoric — 1313 Forsythe avenue.

CLAIR ALBERT DYE,*
Assistant Professor of Pharmacy — 169 King avenue.

THOMAS EWING FRENCH,
Assistant Professor of Drawing — 1458 Worthington.

CHARLES WILLIAM FOULK,*
Assistant Professor of General Chemistry — 41 Eleventh avenue.

CHARLES LINCOLN ARNOLD,
Assistant Professor of Mathematics — 328 West Eighth avenue.

CHARLES A. BRUCE,
Assistant Professor of French — 234 West Tenth avenue.

JOHN H. SCHAFFNER,
Assistant Professor of Botany — 40 West Tenth avenue.

WILLIAM FINLEY LAVERY,
Assistant Professor of Veterinary Medicine — 1700 Neil avenue.

CHARLES BYRON FREDERICK,
Assistant Professor of Veterinary Medicine — Veterinary Hospital.

CORNELIA PORTER SOUTHER,
Assistant Professor of Domestic Art — 1356 Neil avenue.

CHARLES BRADFIELD MORREY,
Assistant Professor of Anatomy and Physiology — 86 King avenue.

WILLIAM EDWARDS HENDERSON,
Assistant Professor of Analytical Chemistry — 41 West Eleventh avenue.

* Absent on leave.
^ Resigned September 21, 1900.

JAMES STEWART HINE,
Assistant Professor of Entomology — 26 West Fourth avenue.

KARL DALE SWARTZEL,
Assistant Professor of Mathematics — 57 West Eighth avenue.

GEORGE H. McKNIGHT,
Assistant Professor of Rhetoric and English Language — 312 West Seventh avenue.

HERRICK CLEVELAND ALLEN,
Assistant Professor of Public Speaking — 275 East Gay street.

BURT BIDWELL HERRICK,
Instructor in Cheese-making — 167 Tenth avenue.

FREDERICK EDWARD KESTER,
Instructor in Physics — 1473 Neil avenue.

WILLIAM ABNER KNIGHT,
Assistant in the Industrial Department and Foreman of the Machine Shops — 206 West Lane avenue.

THOMAS KENYON LEWIS,
Assistant in Drawing — 1298 Dennison avenue.

FRANCIS LEROY LANDACRE,
Assistant in Zoology and Entomology — 1382 Highland street.

HARRIET TOWNSHEND,
Assistant in Library — 53 West Eleventh avenue.

MAUDE DOROTHY JEFFREY,
Assistant in Library — 65 West Eleventh avenue.

ALBERT EARL VINSON,
Assistant in Agricultural Chemistry — 134 West Ninth.

GERTRUDE STOWELL KELLICOTT,
Assistant in Library — 1382 Highland street.

CLARK WISSLER,*
Assistant in Philosophy and Pedagogy — 1855 North High street.

EDWARD EVERETT SOMERMEIER,
Assistant in Metallurgy and Meteorology — 1590 Neil avenue.

FRANK RUHLEN,
Assistant in Agriculture — North Dormitory

LUCY ALLEN,
Assistant in Library — 1490 Neil avenue.

DON CARLOS HUDDLESON,
Assistant in Gymnasium — 249 West Lane avenue.

JOSEPH HENRY VOSSKUEHLER,
Assistant in Drawing — 201 West Eleventh avenue.

CLAUDE B. GUITTARD,
Assistant in Library — 80 McMillen avenue.

ALBERT V. BLEININGER,
Assistant in Ceramics — North Dormitory.

OLIVER V. BRUMLEY,
Assistant in Veterinary Medicine — University Grounds.

SILAS MARTIN,
Assistant in Drawing — 1269 Dennison avenue.

JOHN B. SANBORN,
Assistant in American History — 215 West Tenth avenue.

FRED ALAN FISH,
Assistant in Electrical Engineering — 289 West Eleventh avenue.

HOMER CHARLES PRICE,
Assistant in Horticulture and Forestry — 1594 Neil avenue.

* Resigned September 21, 1909.

WALTER ALEXANDER LANDACRE,
Assistant in Pharmacy — 1574 Summit street.

WILLIAM HENRY RENCK,
Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops — 910 West Rich street.

CHARLES PHILIP CROWE,
Assistant in Industrial Arts and Forge Master — 971 Highland street.

FRANCIS MARION HAMILTON,
Assistant in Philosophy and Education — 1355 North High street.

JOHN WESLEY GROVES,
Assistant in Civil Engineering — 38 West Eighth avenue.

DELBERT ALONZO CROWNER,
Assistant in Butter-making — North Dormitory.

ELISHA SMITH,
Assistant in Cheese-making.

MELVIN DRESBACH,
Fellow in Anatomy and Physiology — 236 West Eighth avenue.

FRANK ORVILLE CLEMENTS,*
Fellow and Laboratory Assistant in Chemistry — 252 West Eighth avenue.

FREDERICK J. HALE,
Fellow and Laboratory Assistant in Mechanical Engineering — 239 West Tenth avenue.

EMMA LEANNA BALL,
Fellow and Assistant in Mathematics — 225 King avenue.

JOHN BERNARD PARKER,
Fellow and Theme Assistant in Rhetoric — 43 West Woodruff avenue.

ALBERT HEBER McINTYRE,
Fellow in Industrial Arts — 240 West Eighth avenue.

DONALD ALEXIS KOHR,
Fellow, and Laboratory Assistant in Chemistry — 1590 Neil avenue.

JOHN WESLEY YOUNG,
Fellow, and Assistant in Mathematics — 883 East Main street.

HAROLD WARNER BROWN,
Fellow, and Assistant in Physics — 242 King avenue.

HERBERT W. KENNEDY,
Emerson McMillin Fellow in Astronomy — 164 West Ninth avenue.

SAMUEL WILLIAMSON COLLETT,
Fellow in Botany — 48 West Woodruff avenue.

HERBERT CHARLES GORE,
Fellow and Laboratory Assistant in Chemistry — 185 West Ninth avenue.

CHARLES ARTEMUS GRATE,
Fellow and Laboratory Assistant in Mechanical Engineering — 1610 Highland street.

GRACE L. PITTS,
Fellow in Economics — 309 East Gay street.

ALICE DUFOUR,
Fellow and Assistant in Botany — 374 Oak street.

WILBER E. MANN,
Emerson McMillin Fellow in Economics — 1340 Hunter street.

WILLIAM C. MILLS,
Curator of Archaeology — 91 West Frambes avenue.

* Resigned January 23, 1900.

EXECUTIVE DEPARTMENT

1899-1900

WILLIAM O. THOMPSON.....President
ALEXIS COPE.....Secretary Board of Trustees and Bursar
W. C. McCRACKEN.....Chief Engineer
KATHERINE H. DUNCAN.....Executive Clerk
EDITH D. COCKINS.....Registrar
EDITH R. HUBLER.....Telephone Exchange
CARL E. STEEB.....Accountant
CHARLES LOW.....First Assistant Engineer
WILLIAM STANDLEY.....Second Assistant Engineer
THOMAS BOUDE.....First Fireman
W. E. CASE.....Second Fireman
JAMES KELLEY.....Lawnkeeper

JANITORS

ARTHUR CHANTLER.....University Hall
HENRY CHANTLER.....Orton Hall
GEO. W. GOODSPEED.....Chemical Hall
JOHN H. BROWN.....Hayes Hall
GEO. DENNY.....Horticultural Hall and Veterinary Hospital
D. D. GEREN.....Gymnasium
WILLIAM WHITESTINE.....Biological Hall
M. N. COOK.....Townshend Hall

STATE GEOLOGIST.

(1) PROFESSOR EDWARD ORTON.

STATE SEALER OF WEIGTHS AND MEASURES.

THE PROFESSOR OF PHYSICS, *Ex-Officio.*

(1) Died October 16, 1899, and was succeeded by Professor Edward Orton, Jr.

COLUMBUS, O., June 30, 1900.

His Excellency, HON. GEO. K. NASH, Governor of Ohio:

DEAR SIR: I have the honor to transmit herewith the thirtieth annual report of the Board of Trustees, Ohio State University.

Very respectfully,

Your obedient servant,

ALEXIS COPE, *Secretary.*

The interest thus accumulated was awarded on competition to Mr. Charles W. Gayman, of the class of 1900, in accordance with the terms of the gift, — he having submitted the best essay on the principles underlying our form of government.

RECEIPTS AND DISBURSEMENTS.

The following are the receipts and disbursements for the year ending June 30, 1900:

RECEIPTS.

Balance in treasury June 30, 1899	$9,088 04	
Interest on endowment	33,204 22	
State levy	166,076 15	
Sale of refunding bonds	43,611 00	
Appropriation act of congress, 1890	25,000 00	
Rents	1,111 00	
Virginia military lands	30 00	
Student fees	31,920 75	
Sale store room cards	2,954 04	
Sale store room supplies	459 62	
Emerson McMillin fellowships	190 00	
N. B. M. A. scholarship in ceramics	250 00	
Diploma fees	735 00	
American Association for the Advancement of Science (unused appropriation returned)	188 51	
Sale of Buckeye engine	450 00	
Interest on W. J. Bryan prize	8 15	
Sale of supplies, ceramics department	50 00	
From commencement luncheon	59 00	
Miscellaneous receipts	232 32	
		$315,617 80

DISBURSEMENTS.

Salaries	$153,197 84
Expenses of trustees	387 87
Repairs	10,680 34
Fuel	6,705 60
Gas	1,448 14
Library	5,974 18
Printing and advertising	2,858 12
Special bulletins	1,362 00
Virginia Military Lands	5,059 16
Roads and grounds	1,240 43
Water rates	1,219 77
Bonds and interest	81,313 20
Repairs and extensions, heat, power and light plant	4,682 53
Residence for astronomer	2,585 06
Apparatus	9,558 99
Laboratory supplies	10,320 45
Tools and machinery	1,756 73
Arc lamps	200 00
Orton memorial	121 25
Furniture, cases and shelving	962 29
Lockers	375 00

Blank books and stationery	437 26	
Rent for fire alarm and watchman boxes	112 00	
Postage	399 90	
Commencement expenses	565 45	
Installing experimental boiler	1,093 10	
Agricultural students' union	119 10	
Oils	201 22	
Telephone service	365 27	
Telegrams	40 58	
Messenger service	468 90	
Extra clerical services	103 90	
General supplies, cleaning materials, etc	434 66	
Freight and cartage	666 73	
Examination paper	221 90	
Live stock	182 00	
Feed	300 29	
Seeds and plants	132 26	
Miscellaneous	637 87	
		$308,491 34
Balance in hands of treasurer June 30, 1900		$7,126 46

In the treasurer's report filed herewith said receipts and disbursements are set forth in fuller detail.

THE VIRGINIA MILITARY LANDS.

To June 30, 1899, the total receipts from sales of the Virginia military lands, granted to the university by the act of the general assembly of March 26, 1872, were	$65,395 28	
The receipts from this source during the year ending June 30, 1900, were	30 00	
		$65,425 28
The expenses incident to the survey and disposition of said lands to June 30, 1899, were	23,999 09	
Such expenses for the year ending June 30, 1900 (including $5,000 paid in settlement of pending suits hereafter mentioned) were	5,059 46	
		29,058 55
Leaving net cash receipts to June 30, 1900		$36,366 73
Of this sum on June 30, 1899, there had been paid into the state treasury to the credit of the endowment fund	13,665 14	
And expended for building and maintaining residences for the professors under act of April 17, 1882	20,052 51	
During the year ending June 30, 1900, there was expended for a residence for the director of the Emerson McMillin Observatory	2,585 06	
		36,302 71
Leaving balance June 30, 1900		$64 02

The receipts and disbursements of this fund for the year ending June 30, 1900, are included in the preceding general account of the aggregate receipts and disbursements.

ADDITIONS TO ENDOWMENT.

For the period ending June 30, 1899, the additions to the endowment under the operations of an act of the general assembly of March 14, 1889, entitled "an act to quiet title to unpatented lands in the Virginia military district of Ohio," the act of April 21, 1893, entitled "an act for the relief of certain persons who formerly held lands in the Virginia military district of Ohio," an act amendatory of said last mentioned act passed May 21, 1894, and an act passed April 26, 1898, entitled "an act making appropriations for the relief of certain persons who formerly held lands in the Virginia military district of Ohio," were $14,776.22.

During the year ending June 30, 1900, under the operations of said first mentioned act, there was added to the said endowment the sum of $1,275.96: making total additions to the endowment under said acts $16,052.18.

THE KENDRICK SUITS.

The suits mentioned in former reports which grew out of a contract made with the late Mr. Sam Kendrick in 1882, for the discovery of undiscovered lands in the Virginia military district of Ohio, have been finally settled and compromised by the payment to the plaintiffs of the sum of $5,000 inclusive of the costs.

As this important and expensive litigation is now closed a brief resumé of the facts which led to it is presented. In 1882, while the board of trustees, through its agents, was endeavoring to ascertain and dispose of the Virginia military lands granted to the university by act of the general assembly of March 26, 1872, Mr. Sam Kendrick of Chillicothe, at that time principal surveyor of said lands, represented to the board that he had in his possession the only complete records of said lands and was able to point out numerous tracts which the agents of the board had failed to discover and which would yield a handsome addition to the funds of the university. After full consideration of these representations, the board, in August 31, 1882, employed said Kendrick "to discover, survey, plat, cause to be appraised, and sell undiscovered lands in the Virginia military district, belonging to the Ohio State University," * * * "the sales and the conduct of all litigations and negotiations concerning the same to be reported to the executive committee of the board and by said committee approved before the same shall be binding upon either party. After said approval, all expenses of surveying, appraising or litigating, and other necessary expenses incurred, save and except the time given by said Kendrick, to be paid out of such funds as may arise from each tract of said lands by sale or compromise, and the residue of each tract to be divided as follows: to the Ohio state university 66 2/3 per centum and to said Kendrick 33 1/3 per centum." It was provided in said contract of employment that * * * "Undiscovered lands shall be held to include all of said Virginia military lands reported by said Kendrick, and not known to the board or any of its former or present

agents." And that "the said Kendrick is hereby fully authorized to compromise and settle any case or cases with the approval of the executive committee, this authority to terminate on the 10th day of November, 1883."

Provision was made in the contract for the payment of the moneys received, and the making of proper conveyances, and it was also further provided, "that the said Kendrick is to be entitled to the said 33 1/3 percentum of all cases reported by him and approved by said committee, and not finally settled at the date fixed for the determination of this authority.

Mr. Kendrick accepted such employment on the day aforesaid, August 31, 1882, and on the 14th day of November, 1882, reported to the executive committee the discovery of 38 tracts of land and was authorized by the committee "to investigate the titles of said several tracts."

Mr. Kendrick continued from time to time to report additional discoveries until November 14, 1883, when the number had reached 50. On that day, after hearing a verbal report of his transactions concerning said lands, the board passed a resolution declaring that as his contract by the terms thereof ceased on November 18, 1883, it was the opinion of the board that it should not be renewed or extended and directing him "to close up the business reported by him by the second Tuesday of November, 1884.

While engaged in closing up the discoveries already reported Mr. Kendrick from time to time reported other discoveries and the reports were received and filed. In some cases he was authorized to settle and compromise cases of discoveries reported after the date on which the contract was formally terminated, and after the time fixed by resolution for closing up the business.

In 1884, in the case of Fussell v. Gregg the supreme court of the United States decided, or seemed to decide, that in all cases of lands in the Virginia military district of Ohio, where the survey was made prior to January 1, 1852, and was not filed in the general land office in Washington, until after that date, the proceedings were void, the lands remained unappropriated and passed by the act of cession to the state of Ohio, and by act of the general assembly to the Ohio state university.

Stimulated by this decision Mr. Kendrick began to report these lands to the board as discoveries. The case of Coan v. Flagg, decided by the supreme court of the United States in 1887, confirming the opinion of the same court in the case of Fussell v. Gregg still further stimulated the activity of Mr. Kendrick in reporting the unpatented surveys as discoveries until the alleged discoveries reported by him reached the number of 238.

These decisions and the widely asserted claims of Mr. Kendrick spread consternation among the occupants of these surveys throughout the Virginia military district.

Many of them had been occupied and improved by their then owners and those under whom they claimed title for periods varying from twenty

to eighty years. They had built their homesteads and had paid taxes upon them and had exercised all the privileges of ownership, all this time, in the belief that their titles were secure. When informed that their titles were absolutely void and that their lands belonged to some one else their feelings can better be imagined than described.

They applied to the general assembly for relief, and on March 14, 1889, an act was passed providing for quieting the titles to these lands. The act provided that on its acceptance by the board of trustees, the occupants of such surveys might, on payment of two dollars and on proof that they or those under whom they claimed had occupied and improved the lands for more than twenty-one years, demand of the board deeds quieting their titles, and thereupon the auditor of state was required to add to the endowment fund of the university one dollar for each acre of land so conveyed. On the 20th day of June, 1889, after full discussion and careful deliberation, the board formally accepted the provisions of said act.

Before such acceptance, an effort was made to effect a settlement with Mr. Kendrick, but his demands were so extravagant that no agreement was possible. After such acceptance, on the 16th day of November, 1889 ,he filed a suit against the board of trustees in the court of common pleas of Franklin county, setting forth the contract before referred to, the filing of the aforementioned discoveries and asking judgment for the sum of $133,333.33, with interest from March 14, 1889.

A few months later Mr. N. W. Evans, of Portsmouth, who had been acting as Mr. Kendrick's attorney, also filed a suit in the same court against the board of trustees claiming $5,000 for legal services rendered in connection with these reported discoveries.

With the advice and consent of the attorney general, Messrs. Harrison, Olds & Henderson were employed to defend these suits.

The preparation for their defence involved a vast amount of labor on the part of the board and its attorneys, requiring a patient and careful examination of the Virginia military land records both in Ohio and in the general land office in Washington. The evans case was tried in January, 1898, and was decided in the court of common pleas in favor of the university, but was carried on error to the circuit court. Two weeks were occupied in its trial. The immense labor involved in the trial of the Kendrick case, which was really two hundred suits in one, — each alleged discovery having its separate and distinct history and the claim therefor depending upon the separate and distinct facts connected therewith, — made the board of trustees very willing to compromise on reasonable terms. When, therefore, a proposition from the plaintiff was made to settle the case for a sum not greater, probably, than it would cost to try it, the proposition was accepted and by agreement the case was settled and dismissed by payment to the plaintiff of the sum of $4,000 including costs of suit.

As the two cases grew out of the same transaction, the case of N. W. Evans against the board of trustees was at the same time settled and compromised for the sum of $1,000, out of which the costs in the suit, amounting to $246.96, were paid by the board of trustees.

NEW MORRILL FUND.

The following statement shows the receipts and disbursements for the year ending June 30, 1900, of appropriations made by act of congress, approved August 30, 1890, and known as the "New Morrill Fund," and which are included in the preceding statement of the aggregate receipts and disbursements for that period.

RECEIPTS.

Balance in treasury June 30, 1899	$37 31	
Appropriations for year ending June 30, 1899	25,000 00	
		$25,037 31

DISBURSEMENTS.

For instruction and facilities in agriculture	$4,341 61	
For instruction and facilities in mechanic arts	8,178 19	
For instruction and facilities in English language	1,258 99	
For instruction and facilities in mathematical science	2,072 82	
For instruction and facilities in natural and physical science	7,860 40	
For instruction and facilities in economic science	1,126 99	
		24,839 00
Balance in treasury June 30, 1900		$198 31

The law of congress making the appropriation requires a detailed annual report of the receipts and disbursements of this fund, which report for the year ending June 30, 1900, is appended to the treasurer's report filed herewith.

It will be seen by the foregoing statement that the appropriation of the general government which begun at $15,000 a year and was to be increased annually by $1,000 until the amount was $25,000 and then continued at that sum, has reached its highest limit.

This annuity was, by the act of 1890, which created it, made payable out of the proceeds of the public lands.

In the 55th congress its continuance was threatened by a bill popularly called the "free homes bill", which gave to settlers on the agricultural public lands which had been acquired by treaty or agreement from the various Indian tribes, patents for their lands "upon payment to the local land officers of the usual and customary fees and no other or further charge of any kind whatsoever."

This bill in the opinion of the commissioner of the general land office would give to such settlers about $35,000,000 of the anticipated receipts from sales of the public lands and would virtually wipe out this source of national revenue. The bill passed the senate and was favorably

reported by a committee of the house, when the executive committee of the American land grant college association, on which the university is represented, met in Washington and organized an opposition to its passage. The opposition was ably led by General C. H. Grosvenor, and was successful in defeating the measure.

At the late session of the 56th congress the bill was again introduced into and passed the senate, but in the house, to allay the opposition of the land grant colleges, the author of the bill accepted an amendment prepared by the executive committee of the land grant college association, providing: "That in the event that the proceeds of the annual sales of the public lands shall not be sufficient to meet the payments heretofore provided by an act of congress approved August 30, 1890, for the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts, established under the provisions of an act of congress approved July 2, 1862, such deficiencies shall be paid by the United States."

The bill passed the house with this amendment, the amendment was concurred in by the senate, and as so amended the bill became a law, thus putting at rest all fears for the permanence of the Morrill annuity.

SCHOOLS OF MINES

At the late session of congress a number of bills were introduced looking toward a congressional appropriation in aid of schools of mines in the several states and territories.

The executive committee of the land grant college association, watchful of the interests of the institutions they serve, got together the several bills introduced and prepared a bill modeled after the Morrill Act of 1890, which was introduced into the senate by Senator Tillman of South Carolina, and into the house by General C. H. Grosvenor of Ohio. The bill provides an appropriation of $10,000, increasing the amount $1,000 annually until it reaches $15,000, at which sum it is to continue, "for the establishment and maintenance of schools or departments of mines and mining in connection with colleges for the benefit of agriculture and mechanic arts in accordance with the provisions of an act of congress approved July 2, 1862." * * * "to be expended for geological instruction, mining engineering, metallurgy, research in road-building material and its proper application, and the branches of learning related thereto, including the various branches of physical, natural and economic science and the facilities for such instruction, research and experiment, in order to promote a liberal and practical education and secure the most intelligent use, conservation and development of the mineral resources of the country."

Representatives of the executive committee of the land grant college association appeared before committees on mines and mining of the senate and house and advocated its passage.

The bill passed the senate by a unanimous vote and in the house was referred to the committee on mines and mining, which on May 22, 1900, reported unanimously in its favor.

The president of the university and the representative of the university on the executive committee of the land grant college association, by authority of the board of trustees, went to Washington and took an active part in urging this legislation.

They found an active and earnest sentiment in the house in favor of the measure, and practically no opposition to it. The pressure of other bills in the closing hours of the session prevented its consideration, but assurances were given that at the adjourned session it should have a day fixed for a hearing on its merits. Its friends have little doubt of its final passage at that time.

BONDED INDEBTEDNESS.

The bonded indebtedness of the university June 30, 1899, was $355,000, due and payable as follows: $55,000 December 1, 1899; $10,000 June 1, 1900; $55,000 December 1, 1900; $10,000 June 1, 1901; $55,000 December 1, 1901; $10,000 June 1, 1902; $55,000 December 1, 1902; $10,000 June 1, 1903; $55,000 December 1, 1903; $10,000 June 1, 1904; $15,000 December 1, 1904; $10,000 June 1, 1905; $5,000 December 1, 1905.

Of this indebtedness $60,000 bore interest at six percent and $295,000 at four percent per annum, payable semi-annually.

Twenty-five thousand dollars of said indebtedness falling due December 1, 1899, were paid when due and the bonds taken up and cancelled.

Under and pursuant to the provisions of an act of the general assembly entitled "an act to authorize the trustees of the Ohio state university to refund and extend the time of payment of portions of the bonded indebtedness of said institution as the same becomes due," passed April 23, 1898, $30,000 of the four and one-half percent certificates of indebtedness falling due December 1, 1899, were taken up by an issue of the same amount of four and one-half percent refunding bonds falling due, $10,000 December 1, 1905, and $20,000 December 1, 1906.

Said bonds brought a premium of $2,705. Under the provisions of the same act the $10,000 of six percent certificates of indebtedness falling due June 1, 1900, were also taken up by a further issue of four and one-half percent refunding bonds falling due $5,000 December 1, 1906, and $5,000 December 1, 1907. Said refunding bonds brought a premium of $906. The premiums received in these operations reduces the nominal interest on the four and one-half percent bonds to a little less than three percent.

Said reductions of principal and interest left the bonded indebtedness June 30, 1900, $330,000, of which $50,000 bears interest at six percent and $280,000 at four and one-half percent per annum, payable semi-

annually. Said remaining indebtedness falls due as follows: $55,000 December 1, 1900; $10,000 June 1, 1901; $55,000 December 1, 1901; $10,000 June 1, 1902; $55,000 December 1, 1902; $10,000 June 1, 1903; $55,000 December 1, 1903; $10,000 June 1, 1904; $15,000 December 1, 1904; $10,000 June 1, 1905; $15,000 December 1, 1905; $25,000 December 1, 1906; $5,000 December 1, 1907.

INCREASE OF UNIVERSITY LEVY.

The necessity for additional buildings occasioned by increasing numbers of students had become so urgent that at a meeting of the board of trustees held in November, 1899, a committee composed of the president, the secretary and representatives of the board of trustees and faculty was appointed to present the matter to the incoming legislature.

The crowded condition of the department of physics and the entire lack of rooms in which the students of the college of law could be comfortably accommodated impelled the committee to make a special appeal in their behalf.

Accordingly when the general assembly met in January said committee matured a bill providing appropriations for erecting a law building and a building for the department of physics.

The bill was introduced into the house by the Hon. F. H. Heywood and referred to the finance committee.

In the hearing before the committee the needs of the university were ably presented by President Thompson.

The finance committee, while recognizing the urgent needs of the university, were averse to making any appropriation for the purpose out of the general revenues, but suggested an increase of the university levy. In accordance with such suggestion Mr. Heywood offered as a substitute for his original bill a bill increasing the university levy five one-hundredths of a mill, the increase to be used solely for the erection and equipment of buildings. The substitute was favorably reported by the finance committee, passed both houses with practically no opposition and became a law March 29, 1900.

No part of the funds provided by such levy will be available until about the middle of March, 1901.

The university is under great obligation to the Hon. F. H. Heywood who so ably championed and wisely guided the measure through the house, and to the Hon. E. H. Howard who had charge of it in the senate and secured its passage in that body. They are both graduates of the university and it is gratifying to have their names connected with an act of such importance to their alma mater.

To the other members of the general assembly who aided in this legislation the trustees on behalf of the university and its friends desire to make profound acknowledgment. It will be their ambition to so administer the funds so generously given that not a dollar shall be wasted

or misapplied, but that the whole shall be used in such a manner as to secure the largest returns for the outlay.

It has been decided to erect a law building before a building for the department of physics and as soon as practicable to have the plans, specifications and estimates therefor matured so as to begin work on the building at the earliest practicable moment.

Other buildings are needed besides those provided for as above set forth, as will be seen by the report of the president, to which attention is invited.

ASTRONOMER'S RESIDENCE.

The work in research at the Emerson McMillin Observatory has already arrested the attention of leading astronomers both in this country and in Europe.

Early in the spring Professor Vogel of the Pottsdam Observatory in a review of the work done in the last twenty-five years upon motion in the line of sight, mentioned the work along this line done at Paris. Cambridge, England, the Lick Observatory and the *Emerson McMillin Observatory* as showing the marked progress in this new branch of modern astronomy.

Public mention was made last year of the fact that of the 57 stars whose motion in the line of sight had been determined, five of them had been determined at the Emerson McMillin Observatory by its director, Professor Henry C. Lord.

The work at this observatory has been done under unfavorable conditions because the astronomer had no place of residence near the observatory.

An observatory differs materially from other laboratories in the fact that observations are absolutely dependent on the conditions of the sky. The sky must not only be clear but the building must be opened up and cooled off before observations can begin and it frequently happens that the best nights follow days which are cloudy until late in the evening. With the observer living a mile away many hours of right conditions are lost which would not be the case if the observer lived in close proximity to his work.

These objections apply as well to students at work in the observatory as to the astronomer, for their work must be done under the same conditions. It has happened that the work of an entire evening has been lost because the astronomer lived too far away from the observatory to catch the favoring conditions of a break in the clouds which gave an hour of clear sky.

Recognizing the necessity for a residence near the observatory for the astronomer, where advantage could be taken of every favorable opportunity for observations, on September 21, 1899, President Thompson presented the matter to the board of trustees together with prelim-

inary plans, estimates, etc., for such a residence prepared by Professor Henry C. Lord, director of the Emerson McMillin Observatory.

Said plans, estimates, etc., were referred to the farm committee and action thereon deferred to the November meeting.

At the November meeting the farm committee submitted to the board completed plans, specifications and estimates for such building which were adopted by the board and the secretary was directed to present them to the governor, auditor of state and secretary of state for their approval and if approved by them then to give notice as required by law of the time and place when and where sealed proposals would be received for furnishing the materials and performing the labor necessary for the erection of the building. At the same time the sum of $5,000 of the receipts from sales of the Virginia military lands, as authorized by Section 4105-24 of the revised statutes of Ohio, was appropriated to meet the expenses of such erection. The plans, specifications and estimates were approved by the state officers above mentioned, due notice was given as required by law and on January 23, 1900, the bids were opened and the contract for the erection of the building was awarded to Hugh J. McTeague of Columbus, at his bid of $4,092.

The plans, specifications and estimates were prepared by Professor Henry C. Lord, director of the Emerson McMillin Observatory, and he was appointed architect and superintendent of construction, under the general direction of a building committee consisting of the president and secretary of the university and Professor J. N. Bradford.

At this date, June 30, 1900, the building is well under way and will be completed ready for occupancy by the latter part of August.

The building is loated about 100 feet east of the observatory.

OBSERVATIONS OF THE ECLIPSE.

MAY 28, 1900.

As further evidence of the wide recognition of the excellence of the work done at the Emerson McMillin Observatory Professor S. J. Brown of the naval observatory at Washington in organizing expeditions to observe the eclipse of May 28, 1890, requested Professor Henry C. Lord, director of the Emerson McMillin Observatory, to undertake certain observations at Barnesville, Georgia, using the instruments of the Emerson McMillin Observatory.

To accomplish this work it was necessary to make several delicate attachments to the spectroscope and to construct an elaborate stand to carry the instrument. The attachment to the spectroscope consisted of a movable plate holder so arranged that four photographs two inches long and one-half an inch wide could be taken in rapid succession,—the interval between exposures not being over one-third of a second while the exposures themselves could be made long or short as desired, it being only necessary to press a bulb in order to move the plate from

one position to the next. This plate holder was designed and built by Professor Lord with his own hands in the instrument shop of the observatory, and to it is largely due the success of his observations of the eclipse.

In a letter to the secretary of the board of trustees, Professor Lord gives the following account of his work at Barnesville:

"The spectroscope and appliances were finished, set up and tested, boxed and shipped so that I could leave for Barnesville, Ga., May 9. I reached Barnesville on the evening of May 10, and found Professor Updegraff and the corps of the naval observatory already on the ground.

The work of setting up the instrument was at once begun and the first adjustments were made May 17, eleven days before the day of the eclipse but none too soon. These adjustments were already perfected, the final testing being made upon Arcturus on the night of May 26, when everything was found in readiness for the morning of the 28th.

For nearly a week preceding the eclipse I made daily rehearsals of the programme of observations. To this promptness and thoroughness of adjustment, more than to any other one thing, is due the success of my work. This is shown by the fact that on the night preceding the day of the eclipse I was taken quite sick and was but little better the next morning, but so thorough had been my self-imposed drill that I could not have done better had I been in perfect health."

Professor Lord secured seven spectrum photographs at the time of the eclipse; two showing the spectrum of the flash in the orange, green and blue. These photographs are among the best ever taken of this portion of the spectrum. The plates have not been completely measured and much of the work of the observatory has been interrupted and delayed on account of the duties devolved on the professor as architect and superintendent of the astronomer's residence.

When the building is finished, with the increased amount of time at his disposal, and with his abiding place within 100 feet of the observatory he hopes to rapidly complete the eclipse work and to resume his work on motion in the line of sight, which was interrupted by preparation for observations of the eclipse. All expenses connected with the foregoing observations of the eclipse, including Professor Lord's personal expenses, were generously borne by the U. S. naval observatory.

THE ROBINSON TESTING PLANT.

Among the important acquisitions during the year was the gift by Doctor S. W. Robinson of an experimental boiler and the machinery and appliances necessary for making accurate tests of boilers and fuels under varying conditions.

Doctor Robinson was led to make this donation, as was stated by him in a letter addressed to the board of trustees, by his interest in the tests of boilers and fuels made at the university by Professor Hitchcock,

his former assistant, "by reason of the unusual and high value of the results obtained" "and in the belief that the ability and enthusiasm shown by Professor Hitchcock in this work, would, with the more complete equipment proposed, be able to reach results of hitherto unknown importance."

The gift was made on condition that the trustees should assume the cost of installation, and was gladly accepted.

The original gift included a 107 HP Babcock and Wilcox boiler of wrought steel construction, capable of carrying a working pressure of 200 pounds; a Green's fuel economizer for heating the feed water by means of escaping flue gases; an air heater for heating by means of escaping flue gases the external air supplied to the fire; a forced draft fan for drawing air through the heater and from boiler room and supplying same to the fire and to furnish draft for varying degrees of combustion; and an induced draft fan for producing any practical amount of draft independent of stack or chimney.

Dr. Robinson afterwards added to the gift a steam engine for driving the economizer and the necessary iron work for connecting up the fans. The value of the gift is near $3,000.

The apparatus has been installed at a cost of $885.78 and the boiler has been connected with the general heating system for use in emergencies at a cost of $131.33.

Doctor Robinson served on the committee having charge of the installation, gave every detail careful attention, and rejoices with the university authorities, that the institution has the most complete plant of the kind in existence.

THE CAMPUS.

During the year just ended the sum of $1,240.43 was expended on the campus. A brick walk was laid between University and Orton Halls at a cost of $212.05 and the remainder of said sum was expended in mowing the lawn and caring for the roads, walks and drives.

Provision has been made for the beginning of a botanic garden and a few beds of medicinal and other plants have been set out in that part of the campus south of Botanical Hall. An assistant in the department of botany has been employed whose special work is to look after them and make such additions thereto from time to time as the funds will supply, or that can be obtained by gift or exchange with other botanical gardens. With comparatively small expense it is hoped that the university can soon have a botanic garden worthy of the name.

THE LIBRARY.

The expenditures for the library for the year ending June 30, 1900, exclusive of the salaries of the librarian and assistants were $5,974.18.

Of this sum $427.82 was paid for furniture, cases and shelving;

$96.24 for current supplies; $568.85 for binding; and the remainder, $4,881.27, was expended for books and periodicals.

The report of the librarian shows that the number of accessions during the year was 7,443 and the total number of volumes June 30, 1900, 35,430.

Through the courtesy and interest of Mr. L. C. Ferrel, superintendent of documents, Washington, D. C., about 600 public documents were recently added to the books of the library and 766 valuable reports and documents in the United States embassy at Madrid were secured for the university by payment of the freight thereon.

Many gifts of books from private sources are mentioned in the librarian's report, chief among them a collection valued at $150, illustrative of the influence of the Quakers in American history, especially during the colonial period, presented by Mr. John J. Janney of Columbus, and over $400 worth of books on German history presented by Messrs. John and Louis Siebert of Columbus and which have been added to the library bequeathed by Mr. William Siebert of Illinois, whose bequest was mentioned in a former report. Due acknowledgment of these gifts is made elsewhere in this report.

The librarian again calls attention to the pressing need of a library building, which must be provided at an early day.

With such a building in view she has taken up the comparative study of college and university library buildings and has already visited and inspected at her own expense a number of the leading buildings of the kind in the United States.

The board of trustees hopes that at no distant day means will be provided for the erection of such a building, commensurate with the great nd growing needs of the university.

The demand for additional books is greater than the funds of the university can at present supply and the faculty has by resolution petitioned the board to add to the usual annual appropriation for the library the sum ($1,125) annually saved in interest by reduction of the bonded indebtedness, to be expended solely in the purchase of books.

This petition is still pending before the board.

AMERICAN ASSOCIATION FOR ADVANCEMENT OF SCIENCE.

One of the notable events of the year was the meeting in August, 1899, of the American Association for the Advancement of Science.

The board of trustees united with the board of trade of Columbus, the state historical and archæological society, the Ohio society of mining engineers and other learned societies in extending an invitation to this assocation to hold its annual meeting in Columbus and tendered it the free use of the halls, lecture roome and laboratories of the university, which invitation was promptly accepted.

This great association had recently honored Doctor Edward Orton and honored itself by electing him as its president, and it seemed emi-

nently proper that it should hold its annual meeting at the Ohio State University where he had done so much to advance the cause of science.

The session lasted nearly a week and brought together between three and four hundred workers in science, many of them men of world-wide reputation. The halls, lecture rooms and laboratories of the university were thrown open for these meetings and the faculty, citizens of Columbus, and college men of Ohio outside Columbus vied with each other in paying merited honors to the distinguished visitors. A noonday luncheon was served to the members in the armory at which there was an opportunity for making acquaintances and for exchange of social courtesies which added much to the pleasure of the occasion.

Many important papers were read and discussed, and the interchange of ideas and courtesies between the members of the faculty who were present and the scientific men and women from the leading universities and colleges of the country was profitable and inspiring, and has done much to advertise the university and to increase its reputation in the scientific world. The board of trustees voted the sum of $500 toward the entertainment of the association, but the subscriptions by the board of trade and private citizens of Columbus were so liberal that after all expenses of such entertainment were met the committee returned $188.51 of the appropriation.

NATIONAL GRANGE.

In October, 1899 the national grange held its annual meeting at Springfield, Ohio,—the state grange of Ohio meeting at the same time and place,—and on invitation of the board of trustees these organizations spent a day at the university as the guests of the trustees and faculty. The president of the university delivered a welcome address in the chapel to which responses were made by the officers of the organization, after which the members inspected the various buildings, collections and laboratories and went away duly impressed with the liberal provision made at the university for instruction in the branches related to their calling.

FACULTY.

During the year the university suffered a great loss in the death of Doctor Edward Orton who for many years had so ably filled the chair of gology. Doctor Orton was the first president of the university and during the years of its early struggles was the central force around which all its interests revolved. He stood for the broad and liberal policy which finally prevailed as against that which would have kept it within a narrow field and restricted its sphere of usefulness. The labors of Doctor Orton and of the first faculty of the university who nobly sustained him in his policy are now recalled with gratitude by all the friends of the university. Their unselfish devotion to high ideals in educational work, their patient toil and the influence of their lofty characters are woven into the web and woof of the institution. They shaped its ideals and

gave it an individuality which it is to be hoped it may never entirely lose. In December, 1891, Doctor Orton suffered a stroke of paralysis which partly disabled him, but he continued in active charge of his department until the latter part of May, 1899, when he asked to be relieved of a portion of his work and that his salary be proportionately reduced. Knowing that it was in entire consonance with his real wishes, the board of trustees reluctantly complied with his request.

This action on his part now seems to have been a premonition of the closing scene. He recognized that his physical powers were failing but continued to meet his classes and to haunt the geological museum which had grown up under his wise and careful labors until about the second day of October, 1899, when he took to his room. On the thirteenth day of October, 1899, the check for his salary for the previous month was sent to him and on the same day he wrote acknowledging its receipt, saying, "It seems that I worked up to my natural limit. There has not been a day this term when I was able to lecture. When a man loses appetite and power to sleep he is pretty well gone. That is my condition now." On October 16, 1899, he passed quietly away.

Memorial services in his honor were held in the chapel November 26, 1899, at which Dr. G. K. Guilbert, one of his associates in the U. S. geological survey, Dr. T. C. Mendenhall, president of the Worcester Polytechnic Institute, one of his old associates in the first faculty, Ex-President W. H. Scott and Professor Samuel C. Derby of the present faculty and Hon. T. J. Godfrey of the board of trustees paid eloquent and appropriate tributes to his memory.

These addresses, preceded by a brief biographical sketch prepared by Professor Samuel C. Derby, were printed at the expense of the university, bound in a tasteful brochure and placed in the hands of the president for distribution to the faculty, alumni and friends of the university and to the libraries of other universities and colleges.

Doctor Orton stood unchallenged as the university's highest exemplar of broad scholarship and liberal culture, and for the noblest and best things in character and human activity.

Recognition of his worth was not delayed until after his death, as is frequently the case, but found expression during his life in honors paid to him by his fellow workers in the field of science, and in increasing reverence and respect shown for him by his associates in the faculty, by alumni and students and by his fellow citizens.

The board of trustees in 1892 honored him by naming the building erected for the safe keeping of the geological museum, "Orton Hall."

Now that he is gone it is seen how appropriate and fitting it was that his name should thus be perpetuated. In it are stored the valuable collections he made during the period of his greatest activity.

It was his ambition to write in a book with his own hand a description and history of each one of the more than ten thousand specimens

there deposited, and to mark and number them so that they could be readily identified.

This work was fully completed at the time of his death, — the last entries therein having been made October 2, 1899, the day of his last appearance at the university. This book is deposited in the museum and is a priceless memorial of his patient, untiring labors in the field of science.

The building and what it contains are therefore his fitting monument and will speak for him, we trust, as long as the university endures.

Since Doctor Orton's death the work of the department of geology has been carried on by Mr. Charles S. Prosser, associate professor of historical geology and Mr. John A. Bownocker, associate professor of inorganic geology and curator of the museum.

In November, 1899, in recognition of his former services to the university the name of Doctor Stillman W. Robinson was restored to the faculty roll as *emeritus* professor of mechanical engineering.

In June, 1878, Doctor Robinson was called to the chair of physics and mechanics vice Doctor T. C. Mendenhall who had resigned to accept a professorship in the imperial university of Japan.

In June, 1881, Doctor Mendenhall returned to the university as professor of physics and Doctor Robinson was placed in charge, as professor, of a newly created department of mechanics, the name of the department being subsequently changed to that of mechanical engineering.

Doctor Robinson continued in active charge of this department until the latter part of 1895 when he was compelled to give up work on account of failing health, was granted a leave of absence and shortly afterwards resigned.

Since his resignation he has lived near the university and though occupied with many business cares has kept in touch with the university life and retained his interest in its affairs.

His restoration as a member of the university faculty was warmly welcomed by his former associates in the faculty and by the alumni and students who had profited by his instruction.

While the position to which Doctor Robinson has been elected is purely honorary, requiring no special professional work, the counsel freely given of one so eminent in his profession cannot be otherwise than inspiring and helpful to the university.

At the same time Doctor Sidney A. Norton, in similar recognition of his services as the first professor of chemistry, was elected *emeritus* professor of general chemistry, said election to involve no change in his present duties, that of lecturer in general chemistry.

Other less notable changes in the faculty are mentioned in the report of the president, and in the annual catalogue for the year ending June 30, 1900, which are filed herewith and made a part of this report.

The number of professors in the academic faculty is 30; directors of departments, 3; associate professors, 14; assistant professors, 19; lecturers, 1; fellows and laboratory assistants, 16; librarians, 1; instructors, 2; assistants, 27; curators, 1.

The law faculty consists of the dean, 5 professors and 2 lecturers.

The position and compensation of members of the faculties and other employees of the university are stated elsewhere in this report.

DEGREES.

At the commencement in June, 1900, on the recommendation of the faculty, the following degrees were conferred:

MASTER OF ARTS.

Lucy Allen, B. A., Columbus, O.; William Edward Bohn, B. A., (German Wallace College), Olmsted Falls, O.; Paul Revere Good, B. A., Westerville, O.; Anna Brewster Hirst, B. A., (Antioch College) Yellow Springs, O.; Wilbur E. Mann, B. Ph., Columbus, O.; John Bernard Parker, B. A., Danville, O.; Zella Vina Robinson, B. Ph., Columbus, O.; Herbert Oswald Williams, B. A., Columbus, O.

MASTER OF SCIENCE.

Frederick James Hale, M. E., Columbus, O.; Washington J. Machwart, B. S., (Muskingum College) Mt. Eaton, O.; Raymond Carroll Osborn, B. Sc., Fargo, N. Dakota.

BACHELOR OF SCIENCE

(In Agriculture)

Vernon Hayes Davis, Byesville, O.; Elmer Otterbein Fippin, Briggsdale, O.; Merritt Findlay Miller, Ridpath, O.; Charles Napoleon Mooney, Milan, O.; Arthur Gillett McCall, McGaw, O.; Charles Benjamin Steward, Marcy, O.; Frederick Wellington Taylor, Wooster, O.

BACHELOR OF SCIENCE

(In Horticulture and Forestry)

Frederick Jared Tyler, Perry, O.

BACHELOR OF SCIENCE

(In Domestic Science)

Laura A. Weisman, Columbus, O.

BACHELOR OF ARTS.

Eliza Daugherty Barcus, Columbus, O.; Homer Zurmehly Bostwick, Columbus, O.; J. Loring Courtright, Circleville, O.; George William Stimson, Columbus, O.; John Hervey Eagleson, Columbus, O.; Joseph Pentecost Eagleson, Columbus, O.; Arthur Byron Harward, Columbus, O.; George Melville Karshner, Columbus, O.; William Watts Parmenter, Mt. Vernon, O.; Mary Washington Rice, Columbus, O.; Charles Boyd Sayre, Columbus, O.; Fred Lant

Travis, Pana, Ill.; John Francis Travis, Green Camp, O.; Earle Downs West, Columbus, O.

BACHELOR OF PHILOSOPHY

(Latin Course)

Ida May Fisher, Columbus, O.; Anna Faye Howard, Columbus, O.; Richard Thomas Jones, Columbus, O.; Grace Lenore Pitts, Columbus, O.; Margaret Glaze Pulling, Columbus, O.; Mae B. Schaff, Columbus, O.; Lawrence David Thomas, Lancaster, O.; Harry Porter Weld, Marysville, O.

BACHELOR OF PHILOSOPHY

(Modern Language Course)

Edna Alice Andress, Birmingham, O.; Frank Arthur Bohn, Olmsted Falls, O.; Charles Fuller Dowd, Toledo, O.; Hedwig Eloise Gamper, Columbus, O.; Victor Clarence Moon, Columbus, O.; Clara Maud Williams, Columbus, O.; Mary Grace Young, Mt. Vernon, O.

BACHELOR OF PHILOSOPHY

(English Course)

Royal Albert Abbott, Columbus, O.; Florence Louise Bell, Columbus, O.; James Henry Burgess, Big Horn, Wyoming; Alice Marie Connor, Columbus, O.; Ellen Josephine Connor, Columbus, O.; Dille Augusta Dill, Columbus, O.; Bertha Webb Eisenbeis, Columbus, O.; Ross Garfield Fox, Columbus, O.; Charles Welton Gayman, Canal Winchester, O.; Hattie DeLong Hoffman, Columbus, O.; Allen Brown Jaynes, Columbus, O.; Gordon Donald Kinder, Ottawa, O.; David Klein, Columbus, O.; Caroline Estelle Knight, Columbus, O.; Charles Howard Lisle, Pataskala, O.; Gretchen Pauline Miller, Columbus, O.; Raymond McCallum, Dayton, O.; Talmadge Archer Rickey, Columbus, O.; Carl Fletcher Roebuck, Dalton, O.; Dudley Scott, Columbus, O.; Charles Tod Singleton, Columbus, O.; Albertine Charlleen Smith, Columbus, O.; Virginia Roletta Smith, Columbus, O.

BACHELOR OF SCIENCE.

Harvey Clinton Dollison, Columbus, O.; Wilbur Latimer Dubois, Cincinnati, O.; Fred James Jeffrey, Columbus, O.; Edgar Howard Moore, Columbus, O.; Walter Leffingwell Redrow, Williamsburg, O.; Raymond Jesse Seymour, Columbus, O.; Abner Andrews Osborn, Columbus, O.

CIVIL ENGINEER.

Harry William Bowden, Minerva, O.; Fred Kellogg Pratt, New Philadelphia, O.; Charles William Shepherd, Huron, O.

ENGINEER OF MINES.

Frank Stewart Knox, Columbus, O.; Albert B. Myers, Columbus, O.; John H. Nold, Columbiana, O.

MECHANICAL ENGINEER.

Andrew Francis Cavanaugh, Dayton, O.; George Winfield Frost, Columbus, O.; Harry Smithson Needham, Columbus, O.; William Abner Knight, Columbus, O.; Alfred Heber McIntire, Mt. Vernon, O.; William George Drummond, Cleveland, O.; Arthur Hollingshead Lyon, Wauseon, O.; Robert Rusk Harkins, Columbus, O.; Joseph Henry Vosskuehler, Dayton, O.

MECHANICAL ENGINEER

(In Electrical Engineering)

Alvin Earnest Buchenburg, Holgate, O.; William Clayton Hayman, Holgate, O.; Whitney Earl Lamb, Commercial Point, O.; Robert Rowse Dunlop, Columbus, O.; Charles Marion Nicholson, Columbus, O.; Madone Carington Hunter, Salt Creek, O.; Corliss Edgar Lee, Speidel, O.; Samuel Houston Kanmacher, Columbus, O.; Earl Stimson Johnson, Plants, O.; George Ernest Schreiber, Ironton, O.; Williard Beverly Marshall, Columbus, O.

ENGINEER OF MINES

(In Ceramics)

Walter Morgan Fickes, Steubenville, O.

BACHELOR OF SCIENCE

(In Chemistry)

Clarence Philander Linnville, Hagenbaugh, O.

BACHELOR OF LAWS.

Arthur Everett Addison, B. Ph., Columbus, O.; Clarence Maywood Addison, B. Ph., Columbus, O.; Frederic Ijams Bright, Logan, O.; Anthony Brackett Calvin, A. B., (Northeastern Ohio Normal College) Youngstown, O.; Charles Ross Cary, Millersburg, O.; Alfred Jacobs Croll, A. B., (Ohio Normal University) Tontogany, O.; Roscoe Bryant Darby, Wauseon, O.; D. Homer Graven, A. B., (Ohio Normal University) Nashville, O.; Winfield Scott Hancock, A. B., (Marietta College) Marietta, O.; Ellahue Ansile Harper, A. B., (Ohio Wesleyan University) Columbus, O.; Harry Hartman Hershey, A. B., (Mt. Union College) East Greenville, O.; Benson Walker Hough (as of class of 1899), Delaware, O.; Edward Lafayette Kellison, B. Ph., Quincy, O.; Quinton R. Lane, B. Ph., Canal Winchester, O.; Ingle Alman Morris, Columbus, O.; Clayton Asa McCleary, Ph. B., (Franklin College) Lorain, O.; Robert Edward McClure, Dayton, O.; Benjamin Di Nicola, Barnhill, O.; Allen J. Seney, B. Ph., (University of Michigan) (as of class of 1899) North Baltimore, O.; Amos Claude Stevenson, A. B., (Oberlin College) Fostoria, O.; Edwin Slusser Wertz, B. Ph., Dalton, O.; Lloyd Thomas Williams, B. Ph., Jackson, O.; Frank Wilson, B. S., (Scio College) Jolly, O.; Charles Hiram Woods, Chillicothe, O.; Paul B. Yockey, B. A., Columbus, O.

BACHELOR OF SCIENCE

(In Pharmacy)

Charles Hubbel Kimberly, Columbus, O.

DOCTOR OF VETERINARY MEDICINE.

Clarence Alfred Clawson, B. Sc., (Agr.) Okeana, O.; Harry James Hammond, Sharon Center, O.; William Eddy, Cleveland, O.; Charles James Morrow, Tiro, O.

NUMBER OF STUDENTS.

The enrollment of students during the year was as follows:

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE AND COLLEGE OF LAW.

First semester, 606; second semester, 564.

OTHER COLLEGES.

Fall term, 583; winter term, 546; spring term, 470.

The whole number in attendance during the year as shown by the catalogue was 1252.

The numbers in the several colleges, departments and classes and the courses of study pursued in each are shown in the appendix to the president's report and in the catalogue filed herewith.

GIFTS DURING THE YEAR.

Besides those especially mentioned in the preceding pages of the report, the university has received by gift the following additions to its museums and collections:

DEPARTMENT OF AGRICULTURAL CHEMISTRY.

Set of products from soap works of Proctor & Gamble, Cincinnati, Ohio, packed in glass bottles and valued at $5.00.

A set of products of the Chicago Sugar Refining Co., in twenty-four glass bottles, value $10.00.

DEPARTMENT OF ELECTRICAL ENGINEERING.

Example of early Edison meter by H. W. Brooks, "02."
Circuit breaker by Cutter Electric Co.
Set of blue prints and photographs by St. Louis Car. Co.
Set of photographs by Ridgway Dynamo & Engine Co.
Set of samples of cables by National Cable Co.
Set of photographs by General Electric Co.
Set of armature coils by J. C. Lincoln.

DEPARTMENT OF INDUSTRIAL ARTS.

Eighty-two assorted files, for displaying case.
One 2 in. Sellars shaft coupling from Wm. Sellars Co.
One 2 in. Collins shaft coupling from Jones & Laughlin.
One sample tuyere from Buffalo Forge Co.

DEPARTMENT OF MECHANICAL ENGINEERING.

A quarter turn counter shaft from Mr. T. R. Almond, Brooklyn, N. Y.; an 18 in. hydraulic motor from American Impulse-Wheel Co., New York; a large mounted collection of samples of steel and iron drop forgings from The Billings & Spencer Co., of Hartford, Conn.; a sample boiler scale from Mr. O. F. Conover, Toledo, O.; one 3 in. sectional pop safety valve from the Crosby Steam Gage and Valve Co., Boston, Mass.; a large and complete collection of hangers, shafting, clutches and pulleys from the Dodge Mfg. Co., Mishawaka, Ind.; a set of small sections of the Wharton Harrison safety boiler from the Harrison Safety Boiler Works, Philadelphia, Pa.; a special lever and pop safety valve apparatus with steam gauge from the Lunkenheimer Co., Cincinnati, O.; one can of belt dressing from the Ploms Specialty Mfg. Co., Cleveland, O.; sectional models of exhaust steam injector and ejector from Schaffer & Budenburg, Brooklyn, N. Y.; a model of a universal joint from the Vanderbeek Tool Works, Hartford, Conn.

Besides the foregoing, acknowledgment is made for loan of a six horse power gas engine by the Springfield Gas Engine Co., Springfield, O.; a six horse power oil engine from the Aultman Co., of Canton, O.; a hardness testing machine, by Mr. W. J. Keep, Detroit, Mich.

Acknowledgment is made for samples of belting and belt fastenings presented by the following companies: Boston Belting Co., Boston, Mass.; Belting Co., Cincinnati, O.; Carton Belting Co., Quincy, Mass.; Detroit Oak Belting Co., Detroit, Mich.; Diamond Drill & Machine Co., Birdsboro, Pa.; Diamond Rubber Co., Akron, O.; Oliver P. Clay Co., Cleveland, O.; Fayerweather & Ladew, New York, N. Y.; The Malin & Co., Cleveland, O.; Chicago Rawhide Mfg. Co.; Chicago, Ill.; New York Belting and Packing Co., New York, N. Y.; Page Belting Co., Concord, N. H.; Revere Rubber Co., Boston, Mass.; J. E. Rhoades & Sons, Philadelphia, Pa.; Rossendale-Reddaway Belting & Hose Co., Newark, N. J.; Sampson Steel Belt Hook Co., Philadelphia, Pa.; Chas. A. Schieron & Co., New York, N. Y.; Schultze Belting Co., St. Louis, Mo.; William Sumner Belting Co., Tolland, Conn.; W. O. Talcott, Providence, R. I.; and blue prints from the following companies; Atlas Engine Works, Indianapolis, Ind.; Baldwin Locomotive Works, Philadelphia, Pa., Ball & Wood Co., New York, N. Y.; Bates Machine Co., Joliet, Ill.; C. H. Brown & Co., Fitchburg, Mass.; C. & G. Cooper Co., Mt. Vernon, Ohio; W. D. Forbes & Co., Hoboken, N. J., Hooven, Owens & Rentschler, Hamilton, O.; Fraser & Chalmers, Chicago, Ill.; Lane & Bodley, Cincinnati, O.; Mason Regulator Co., Boston, Mass.; Nordberg Mfg. Co., Milwaukee, Wis.; Philadelphia Engineering Works, Ltd., Philadelphia, Pa.; Ross Valve Co., Troy N. Y.; Watertown Steam Engine Co., Watertown, N. Y.; Vilter Mfg. Co., Milwaukee, Wis.; Watts-Campbell Co., Newark, N. J. Cuts of different styles of air compressers were presented by The Rand Drill Co., and descriptive catalogues were sent by The C. W. Hunt Co., of New York, N. Y.; The Ridgway Dynamo & Engine Co., of Ridgway, Pa.; B. F. Sturtevant Co., Boston, Mass., and the R. D. Wood Co., of Philadelphia, Pa.

ESTIMATES.

The following are the estimates for the year ending June 30, 1901:

Salaries	$167,760 00
Bonds and interest	40,037 50
Expenses of trustees	600 00
Fuel and lights	8,500 00
General repairs	5,500 00
Maintenance and repairs heat, light and power plant	4,200 00
Printing and advertising	3,000 00
Roads and grounds	1,500 00
Virginia military lands	3,500 00
Residence for astronomer	2,250 00
Library	5,500 00
Chemical store room supplies	4,250 00
Water rates	1,200 00
Department apparatus and supplies	24,985 00
Incidentals	4,500 00
Total	$277,282 50

Which will be amply met by the anticipated income of the university.

The reports of the president, the librarian and the treasurer are filed herewith and made a part of the report.

Respectfully submitted,

ALEXIS COPE, Secretary.

REPORT OF THE PRESIDENT.

Hon. J. McLain Smith, President of the Board of Trustees, Ohio State University,

DEAR SIR: — I have the honor to submit herewith the annual report of the President of the University for the year ending June 30th, 1900.

The year has been marked by a most cordial cooperation of the Faculty with the President in carrying forward the work of the University. The routine work of the University has suffered no interruption worthy of note in this connection. The instruction in the various departments has been of a high grade and the results of the year are most gratifying to the friends of education.

The death of Professor Edward Orton, Ph. D., LL. D., which occurred on the sixteenth day of October, 1899, removed from the University one of the most beloved instructors the University has ever had. Dr. Orton was the first president of the University, serving in that capacity from 1873 until 1881 when he voluntarily resigned the executive duties to continue in the work of teaching. He remained as Professor of Geology until his death. Few men in Ohio have made so deep an impression upon their students. His noble character, his broad and accurate scholarship, his sympathy with students and his untiring devotion to his work united to make Professor Orton not only a commanding figure among the educational forces of the country but a man beloved by all who knew him. He served as state geologist from 1869 until his death with conspicuous ability. The University has published in pamphlet form the addresses delivered at the memorial services held in the University Chapel, Sunday, November 26th, 1899.

The enrollment of students for the year was the largest in the history of the University and reached the number twelve hundred and fifty-two. Of this number eleven hundred and ninety-seven were from the state of Ohio, representing eighty-seven ocunties, and the remaining fifty-five were from eleven different states of the Union, from the province of Ontario, from the District of Columbia and from Cuba. The widespread territory from which the University draws its students is a matter of interest and satisfaction.

Among the changes pertaining to the Faculty I note the change of rule made by the Trustees providing for an advance in rank of teachers. Hitherto it has been the custom to bring a teacher to the rank of full professor only when he was the head of a department and had earned the right to such a rank by conspicuous scholarship and success in his work. The new rule provides that men may come to the rank of full

professor without the necessity of creating new departments when the demands within the department and the experience and success of the teacher render the promotion desirable. This makes it possible to give to men who have devoted their lives to instruction a suitable rank and title when appropriate. This action is commended by the Faculty and cannot fail to produce good results in the future. For the changes in titles in the Faculty to take effect July 1st, 1900, reference is made to pages 25 and 26 of part second of this report.

The University battalion has, for the year, been under the efficient supervision of Major James Madison Burns, U. S. A., retired. During the year a considerable increase in the equipment was provided by the War Department. It was with deep regret that we learned of Major Burns' desire to be relieved of duty at the Ohio State University in order to accept a similar position at the University of West Virginia. Upon request of the Board of Trustees, Captain George L. Converse, U. S. A., retired, was detailed to serve in this position.

At the Commencement, June 13th, the University conferred one hundred and thirty-seven degrees. A detailed account of these degrees will be found in the report of the Secretary of the Board of Trustees.

THE GROWTH OF THE UNIVERSITY.

The year just closed has been marked by the largest attendance in the history of the University. This fact has brought clearly to view the needs of the immediate future. Notwithstanding the fact that the past five years have witnessed a very considerable development in the buildings of the University it is plain that a greater development is now a pressing necessity.

The legislature in session during the year with great unanimity provided for a special levy of five one-hundredths of a mill in addition to the levy heretofore made with the provision that the proceeds of the additional levy should be used for the construction of buildings. This will provide for a building for the College of Law and for a building for the department of Physics. These buildings have been a necessity for some time and their erection will prove a great relief to the present crowded quarters now much in demand for other purposes.

In the matter of other new buildings it is difficult to decide which are most needed. With no attempt to settle the question of priority I beg to suggest that the growth of the College of Engineering will soon make it impossible to provide for so large a number properly without a building of suitable plan and size. The need of a building for a library is evident to all departments. The equipment of the University in this particular is entirely too meager to satisfy the reasonable demands, to say nothing of the importance of providing first class facilities.

The departments of Botany and Horticulture need better facilities and the efficiency of the departments will be crippled to a considerable degree until the limitations are removed.

The development of interest in Veterinary Medicine — especially in sanitary lines — has shown that an increasing demand for educated veterinarians may be expected. About half of the graduates of this College are now in the service of the United States. To carry on the work of this College as it ought to be done it will be necessary to provide for advanced scientific work, which can not be done with the present facilities. Suitable buildings are the foundation for the work to which I refer.

A WOMAN'S BUILDING.

The need of a woman's building is apparent to every one. The provision by law for women at the University does not wholly meet the needs. Something ought to be done to make provision for young ladies upon the campus for a general headquarters and for a home. The increase of students has made the difficulty of securing suitable accommodations for young ladies greater. The attendance of women is hindered by the lack of accommodations. It would seem that when the state has provided the means of education it might be well to make them more available.

THE ENLARGEMENT OF BUILDINGS.

It is not possible to foresee the growth of a university. Already the University has outgrown the expectations of many of its friends. The present roll of students taxes to the utmost the buildings. In the case of Hayes Hall the present accommodations for the department of drawing are insufficient and overcrowded. At least ten thousand dollars should be expended in the enlargement of this building. Plans for enlargement have been suggested by Professor Bradford that are in harmony with the architectural design. These additions would greatly increase the efficiency of the department.

The Chemical Hall has already proved too small. The freshman class of the present year, to the number of two hundred and sixty, was required to pursue the study of Chemistry. In addition to this may be mentioned all the advanced and elective work. Any further increase in students will render the building entirely inadequate to meet the needs. An addition of at least one hundred feet to the north of the present structure should be made.

The lack of funds for these needed enlargements and improvements makes the problem of administration more embarrassing as the patronage of the University increases.

THE DEPARTMENTS.

The several departments of the University find as the University grows an increasing demand for larger and more complete equipment. The growth and efficiency of a university depends to a large degree upon the condition of its material equipment. In an institution like the State University where scientific and technical education is so prominent there is no practical limit to the money that may be wisely expended in improv-

ing the facilities for education. The growth of the Ohio State University has been very commendable in this particular owing to an intelligent and liberal supervision of the Trustees. However, with every new year new needs arise. I cannot make mention now of the detailed needs in the departments, but make special mention of the fact that the department of electrical engineering needs a considerable equipment in the way of new machinery. In electrical apparatus it is both desirable and necessary that the latest improvements be a part of the equipment. This is an item of considerable expense as the machinery is seldom worn out but usually replaced by newer and better patterns.

In the department of Astronomy considerable progress has been made during the past year in the material equipment. The work has developed the need of a zenith telescope, such as could be purchased for ten or twelve hundred dollars; a house for the same at the cost of about five hundred dollars; a sidereal chronometer at a cost of one hundred dollars; three theodolites at a cost of about one thousand dollars and some smaller items. The importance of astronomical science and the place taken by the University through the efficiency of Professor H. C. Lord abundantly warrant the additional equipment so much needed.

I beg to submit a statement from Prof. J. R. Smith as follows:

"The Board of Trustees has recognized the claims of aesthetics on the institution by adopting a general plan of grounds and buildings, laid down by a professional expert; to which the arrangement must conform; and although opinions must be permitted to differ as to the success of details, there can be no question as to the necessity of some such general plan.

I would respectfully urge the equal claim of the fine arts, historically considered, to recognition at the hands of those who govern the affairs of this growing institution. Architecture, sculpture and painting have been too closely connected with the advance of civilization to be ignored in any schemes of study which deal with the achievements of man in history; and the great improvements and multiplication of reproductive processes have made it possible to present to the eyes of students, in orderly succession, the history of these arts (especially of the first two) with a graphic success not achieved before. The teaching of language, literature, history, architecture and engineering would be much helped and stimulated by access to an even moderately equipped museum containing reproductions of the masterpieces of art."

"The following suggestions towards a working plan are herewith respectfully submitted:

1. In one of the new buildings now contemplated, or in those portions of University Hall soon to be vacated by the College of Law and the Department of Physics, let a room, with office attached, be set aside for a museum of art. To prepare this room properly (as to light,

wall-color, etc.) would cost no more than for any other university purpose.

2. With an appropriation of from $500 to $1,000 a small but educationally valuable collection of plaster casts and photographs could be purchased as the permanent nucleus of the proposed museum. There are also scattered through the various buildings a number of such objects, whose custodians might be glad to transfer them to such a room, where they could have proper care.

3. The care of the collection might, for the present, be vested in an individual or a committee of the Faculty; who should have full charge of the arrangement of the objects in the museum, the purchase of all art-works, and the right to accept or decline any gifts."

I cheerfully join in the suggestions and recommendations made by Professor Smith and call attention to the importance and desirability of developing the plan outlined.

THE DEPARTMENT OF MECHANICAL ENGINEERING.

During the current year Professor Stillman W. Robinson whose term of service dates from 1878 has made a generous contribution to the department in which he has served so conspicuously. By adding to the equipment for experimental engineering one of the best appointed testing boilers manufactured, Professor Robinson has not only greatly increased the facilities for work but has earned the grateful recognition of the University for his generosity.

CONCLUSION.

In concluding this report I cannot refrain from an expression of appreciation of the fidelity manifested by the Trustees in administering the trust reposed in them. It is also a pleasure to note the increasing appreciation of the work of the University by the people of the State.

My personal acknowledgment is due for the cordial reception given me at the beginning of my work and for the hearty cooperation of both the Trustees and Faculty in carrying it forward.

Very respectfully,

W. O. THOMPSON.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
AGRICULTURE.									
Breeds of Live Stock (8)†	3			2			32		
Principles of Breeding (9)		3			2			30	
Stock feeding and Hygiene (10)			3			2			35
Farm Equipment (11)	3			2			19		
Soils (12)		3			2			20	
Farm Crops (13)			3			2			16
Butter Making and Cheese Making (15)		2			8			14	
Dairy Farming (5)		2			2			23	
Butter Making and Cheese Making (6)					16			23	
Butter Mak'g and Cheese Mak'g (7, 15)		2			8			23	
Special					1			8	
Thesis					2	2	8	8	8
AGRICULTURAL CHEMISTRY.									
Principles, Nomenclature, etc. (1)	2			36			55		
Organic Chemistry (8)		2			36			55	
Applications of Chemistry to Agr. (9)			2			36			49
Laboratory (4)		2		36	36	36	13	13	5
Chemistry of Milk and Milk-testing (7)		2						22	
ANATOMY AND PHYSIOLOGY.									
Human Anatomy and Physiol. (1, 51, 52)	6	6	6	5	5	4	73	66	72
General Physiology (2)			3			1			11
Histology and Hist-Chemistry (59, 4)	2	2	2	10	10	10	13	12	12
Physiological Laborat'y (53, 54, 55, 56)	1	1	2	10	7	10	9	10	13
Bacteriology		2			8			57	
Microscopy (5, 58)			1			3			13
Thesis and Similar Work				3	3	3	6	6	6
Chemical Physiology (3)			1			6			7
ASTRONOMY.									
Astronomy and Geodesy (2)	4		4				7		11
General Astronomy (52)			5						7
Advanced Astronomy (55, 56)	2						2		
Astronomy (54)		5						1	
Meteorology (60)			2						18
Thesis and similar work									

† The figures in brackets are the department numbers—for which see Part II of this report

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of studeuts: First Term	Number of studeuts: Second Term	Number of studeuts: Third Term
BOTANY.									
Physiological Botany (6)	3			8			29		
Medical Botany (4)					4			3	
Medical Botany (56)					4			9	
Systematic and Physiological Bot'y (55)	2			8			18		
Physiological Botany (53, 6a)	3			4			12		
Physiological and Economic Botany (7)		3			8			27	
Laboratory Work (57, 58, 60, 64, 66)				6		10	11		13
Elementary Botany (1)			3			12			65
Economic Bot'y and Veg. Pathology (8)			3			8			22
Spe'al and Adv'ced Work (59, 61, 63, 65)				10			5		
CLAY WORKING AND CERAMICS.									
Ceramic Chemistry (8, 3)			1		10	15		1	5
Lectures (4)	5						3		
Analysis of Clays and Minerals (2)		1			15			7	
Lectures (6)			5						4
Analysis of Glasses and Glazes (1, 7)	1			15			7		
Manufacture of Bricks (5)		5						3	
Thesis and Similar Work				20	30	25	1	2	2
Laboratory (9, 10, 11)				20	20	10	2	2	1
Cement Lectures (12)		5						12	
Ceramic Structures (13)		1			4			2	
CHEMISTRY.									
Elementary (51, 52)	3	3		7	7		58	62	
Elementary (7)	11	11		62	61		204	152	
Qualitative Analysis (12)			1			18			37
Qualitative Analysis (53)	1			4			10		
Quantitative Analysis (55, 56, 4)	2	2	3	18	18	15	16	15	20
Organic (57, 58, 8, 9)	5	1	1		8	5	15	13	13
Advanced Chemistry (59, 60)				4	4		6	5	
Applied Chemistry (16)		4						4	
Toxicology (11)			4						7
Thesis and Similar Work					6			8	
Inorganic Preparations (61a, 17)	1			6			7		
Sanitary Analysis (15)			2			5			7
CIVIL ENGINEERING.									
Land surveying (1)	10			30			29		
Topography (4)		1			15			22	
Railroad Surveying (2)			10			30			21
Topographical Surveying (3)	1			10			8		
Working Drawing in Ry. Cons't'n (5)		1			15			11	
Stereotomy (6)		3			15			13	
Bridge Strains (7)			5						12

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
CIVIL ENGINEERING — Concluded.									
Bridge Designing (8)	2½			10			5		
Civil Engineering Laboratory (14)					12			7	
Sanitary Engineering (10)			5						8
Masonry Construction (15)	5						6		
Highways (16)		5						10	
Water Supply (18)		5						7	
Trusses (19)			2			6			9
Surveying (21)			2			4			8
Thesis and Similar Work				8	5	10	5	5	5
Roof Trusses (20)	2			6			1		
DOMESTIC SCIENCE.									
Domestic Economy (7, 8, 9)	1	1	1	6	6	6	7	7	8
Domestic Economy (1, 2, 3)	1	2	1	12	12	12	23	18	17
Domestic Economy (4, 5, 6)	1	1	1	6	6	6	19	15	16
Domestic Economy (10)			1						21
DRAWING.									
Freehand Drawing (1)				20	20	7	206	175	17
Lettering (2)						18			134
Mechanical Drawing (3)	2	4	3	10	12	12	99	92	80
Draughting and Blue Printing (4)		1			4			5	
Photography (7)	1		2	4		8	14		25
Mechanical Drawing (8)	1	1		2	2		9	7	
Mechanical Drawing (10)	2			4			52		
Mechanical Drawing (11)		1			8			1	
Clay Modeling (12)					4	4		5	4
Pen Drawing (14)				4		4	5		9
Domestic Architecture (15)		1	1		4	2		12	9
Technical Drawing (5)	1			6			20		
Orders of Architecture (1)		2			6			4	
Styles of Architecture (2)			2			6			4
Decoration and Ornament (5)		1			4			1	
Drawing (19)			1			9			26
Architecture (6)			2			6			1
Architecture (8)			2			6			1
Arts (17, 18)	1	1		2	4		12	16	
Architecture (3)	1	1	1	8	8	8	1	1	1
Architecture (4)	2						1		
Architecture (7)		3			4			1	
Drawing (16)			1			4			14

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*ECONOMICS.									
Elements of Political Economy (51, 52)	4	4		2	2		64	80	
Practical Problems in Economics (55)..	2						28		
Industrial and Social Reforms (56).....		2						33	
Ind'ial and Fin'ial His'y of the U. S. (60)		2						21	
Seminary (61, 62).....	2	2					11	11	
Industrial Society (53).....	2						21		
Sociology and Statistics (63, 64).....	1	1		4			12	11	
Commercial Geography (65).....	2						10		
Thesis				2½	5		10	10	
Socialism (54)		2						17	
ELECTRICAL ENGINEERING.									
Electrical Engineering (2).....	5	5	5				10	10	10
Electrical Designing (3).....				6	6	6	9	10	10
Electrical Laboratory (4).....				9	9	9	9	7	10
Electrical Engineering (6).....	2	2					24	20	
Electrical Engineering (7).....				12	12		24	20	
Thesis						2		11	11
Special						6			2
*ENGLISH LITERATURE.									
Introduction to Eng. Literature (51, 52)	8	8					76	42	
The English Bible (55, 56).....	1	1					15	14	
Shakespeare (57)	3						12		
The Modern Novel (59.....	6						32		
From Dryden to Johnson (61).....	2						7		
Chaucer (67)	2						8		
Masterpieces (65, 66)	3	3					13	11	
Thesis Work				2	7		5	8	
Literary Problems (69, 70).....	2	2					10	9	
Victorian Prose (71).....	3						11		
Elizabethan Drama (58).....		3						13	
The Drama Since the Restoration (60)..		2						22	
American Authors (62).....		6						50	
Victorian Poetry (72).....		3						13	
*EDUCATION.									
Elementary Educat'l Psychology (51)...	4						24		
Modern Educational Theories (52).....		4						19	
History of Education (53).....	4						13		
The Herbartian Pedagogy (55).....	2						4		
Philosophy of Education (58).....		4						15	
Plato's Republic (54).....		2						10	
Educational Value (67).....		2						11	
Child Study (59).....	2						7		
Scientific Method (69).....	2							15	
Pedagogical Research (72).....		2						5	

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
GEOLOGY.									
Elementary Geology (4)		5			3			7	
Cosmical Geology (2, 51)	5	5		2	2		44	35	
Paleontology (53, 54)				8	18	17	3	6	5
Petrography (55, 56)				6	6	6	2	2	2
Physical Geography (1)			5						25
Economic Geology (3)			5						11
Field Term						8			12
GERMAN LANGUAGE AND LITERATURE.									
Elementary German (1, 51, 52)	16	16					143	106	
Science Reading (2, 53, 54)	2	2					25	18	
German Literature (4, 55, 56)	8	8					51	51	
The German Drama (57)	3						14		
The German Prose (58)		3						14	
Faust I—(59)	2						2		
Deutsche Kulturgeschichte (64)		1						5	
Old High German (68)	2						2		
Mediaeval Lyrics (62)		2						4	
Deutscher Aufsatz (63)	1						5		
Middle High German (61)	2						7		
Sanskrit (71)	2						1		
Gothic (67)	2						3		
*GREEK LANGUAGE AND LITERATURE.									
Elementary Greek	5	5					10	9	
Xenophon's Memorabilia (51)	4						37		
Odyssey (52)		4						34	
Lysias (53)	4						17		
Homer (54)		4						15	
Ancient Art (59, 60)	2	2					26	24	
Attic Drama (68)		2						8	
Graduate	½	½					1	1	
*HISTORY AND POLITICAL SCIENCE.									
HISTORY.									
General History of Europe to close of Middle Ages (51)	6						81		
From close of Middle Ages to French Revolution (52)		6						69	
Political and Constitutional History of England to the Accession of the Stuarts (53)	3						28		

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*HISTORY AND POLITICAL SCIENCE. — Concluded.									
HISTORY.									
From Accession of Stuarts to Present Time (54)		3						19	
Political and Constitutional History of United States (55, 5, 56)	8	8					63	46	
History of Europe from 1789 to 1815 (57)	3						7		
History of Europe since 1815 (58)		3						10	
History of European Colonies (67, 70)	2	2					6	6	
Pro-Seminary (61, 62)	2	2					18	18	
American Colonial History (63)		3					45		
United States Colonial and Constitutional History (64)		3						48	
Historical Bibliography (72)		1						26	
POLITICAL SCIENCE.									
International Law (51)	2						29		
Municipal Government (52)		2						21	
Political Institutions of the United States (53)	3						30		
Comparative Political Institutions of Europe and America (54)		3						26	
History of Diplomacy (56)		2						21	
Thesis Work				4	4		14	14	
HORTICULTURE.									
Elements of Horticulture (1)	2	2	2	4	4	4	22	6	17
Pomology and Viticulture (5)	2			4			4		
Vegetable Gardening and Seed Growing (6)		3			2			15	
Small Fruit Culture (7)			3			3			10
Elements of Floriculture (8)	1			2			4		
Commercial Floriculture (9)		2			2			8	
Home Flower Gardening (10)			1			2			5
Arboriculture (11)	2			2			8		
Forestry (12)		2			2			9	
Landscape Gardening (13)			1			2			7
Special		2			1			2	
INDUSTRIAL ARTS AND SHOPWORK.									
INDUSTRIAL ARTS.									
Advanced Designing (4)				6	6	6	1	1	1
Machine Design (7)						6			6
Workshop Appliances (5)			6						8
Shop Equipment (3)	3	3	3				1	1	1

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899-1900 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
SHOPWORK.									
Carpentry and Pattern Making (7, 1)				10	9	16	44	37	46
Forging (11, 2)				10	13	12	39	45	35
Foundry Work (3)				4			30		
Chipping and Filing (4)				10	6	6	25	40	19
Machine Work (13)				6	6	6	9	3	19
Advanced Machine Work (14)				6	6	6	8	4	2
Advanced Pattern Making (9)						6			2
Advanced Forging (12)						6			2
Advanced Machine Work (15)				4	8	6	1	4	6
Cabinet Work (8)					6			11	
Thesis								5	3
*LATIN.									
Cicero, Livy (51)	8						62		
Plautus, Terence (52)		8						56	
Horace (53)	8						31		
Juvenal, Pliny (54)		8						26	
Roman Historians (55)	3						11		
Elegiac Poets (56)		3						12	
Pharmaceutical (1, 59, 60)	5	5					22	15	
Thesis and Similar Work					2			1	
Prose Composit'n and Tr'slat'n (63, 64)	2	2					10	5	
Greek and Roman Antiquities (67)	2						7		
MATHEMATICS.									
Elementary Algebra (1)	5						13		
Elementary Algebra (2)	5	5	5				17	19	15
Plane Geometry (3, 3a)	10	5					30	25	
Solid Geometry (13)		10						40	
Plane Trigonometry (14)	25		10				182		29
Analytical & Spherical Trigonom't'y (15)		10						141	
College Algebra (16)		15						146	
Plane Analytics (17)			25						129
Space Analytics (18)	20						98		
Differential Calculus (19)		20						86	
Integral Calculus (20)			20						80
Differential Equations (11)	2						19		
Least Squares (8)	2						11		
*MATHEMATICS.									
College Algebra (67)	15						119		
Problems on all Past Work (65, 66)	1	1					4	3	
Advanced Mathematics (63, 64)	5	5					10	5	
Trigonometry (68)		12						87	
Special		5						4	

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
MECHANICAL ENGINEERING.									
Mechanism (3)		5				4		20	9
Analytical Mechanics (6)	10	10					26	25	
Strength of Materials (7)			5						24
Thermodynamics (8)	5						18		
Prime Movers (9)		5						19	
Machinery and Millwork (10)			5						19
Experimental Laboratory (12, 13, 14, 15, 16, 17)		1		12	12	10	14	16	14
Machine Design (18)	5	5					9	9	
Hydraulic Machinery (20)			3						9
Timber and Masonry (22)		5						8	
Experimental Eng'ring Laboratory (25)						10			6
Experimental Eng'ring Laboratory (28)						4			7
Materials of Construction (23)	5						8		
Power Plants (32)			5						12
Graduate Work	4	4		10	10	6	4	3	1
Care of Boiler and Engine		1						26	
Theses (21)				2	6	20	10	9	9
METALLURGY AND MINERALOGY.									
Metallurgy (4)	5	5					15	12	
Metallurgical Laboratory (5)	1	1	1	10	10	10	28	19	25
Ore Dressing (8)	2						4		
Assaying (6)		1			10			14	
Mineral Chemistry (9)			5						4
Mineralogy (2)			3						65
Determinative Mineralogy (3)						10			7
Thesis and Similar Work						3			3
Metallurgical Construction (7)		1			10			4	
MILITARY TACTICS AND SCIENCE.									
Military Drill							400	344	281
Tactics		2						86	
MINE ENGINEERING.									
Mine Surveying (1)	5			9			8		
Ventilation and Haulage (2)		5			3			5	
Mine Engineering (5)	5	5	5	2	3	1	5	5	5
Mine Operating (3)			5			2			4
Mine Surveying (4)	5			9			3		
Mine Engineering (6)			1			8			4

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
PHARMACY.									
Pharmacy (6) (7)	3	2			10		21	8	
Dispensatories (8)			2			10			18
Pharmaceutical Chemistry (9)	3			10			8		
Extemporaneous Chemistry (10)		2			10			8	
Lectures and Dispensing Practice (11)			2			10			8
Materia Medica (12) (13)	3	3					11	9	
Materia Medica and Therapeutics (14)			3						7
Pharmaceutical Assaying (15)	2			10			8		
Methods of Manufacture (16)		2			10	10		8	
Pharmacy (18) (Vet. Students)			5						4
Special (17)					10			1	
*PHILOSOPHY.									
Pschology (51)	4						45		
Psychology (53)	3						46		
Logic and Ethics (52)		4						45	
Logic (54)		6						43	
History of Modern Philosophy (56)		3						14	
His. of Ancient and Medieval Phil. (57)	3						4		
Advanced Work 59) (60)	2	2					6	5	
Physiology & Exp. Psychology (61) (62)	2	2			4		8	5	
Study of Religion (63) (64)	4	2					3	3	
Special	6	1					1	1	
Ethics (55)	3						13		
PHYSICAL EDUCATION.									
Young men				44	44	44	564	564	564
Young women				16	16	16	85	85	85
PHYSICS.									
Elementary Physics (1)	10	10					101	81	
Mechanics and Heat (2) (51) (52)	7	7	6				131	116	108
Problems (3)	2	2	2				31	24	24
Electricity and Magnetism (4)	3						11		
Physical Laboratory				45	45	45	13	60	56
Mechanics, Sound and Heat (53)	1			12			26		
Electricity and Magnetism (54)		1			10			26	
Special		2						4	
*RHETORIC AND ENGLISH LANGUAGE.									
Paragraph Writing (51) (5)	30						385		
Practical Rhetoric (5) (52)		27						364	
Analysis of Prose (53) (54)	8	8					38	47	
Advanced Rhetoric (3) (63) (64)	4	4					79	68	

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Continued.

Subjects	Hours per week: Lectures: First Term	Lectures: Second Term	Lectures: Third Term	Laboratory: First Term	Laboratory: Second Term	Laboratory: Third Term	Number of students: First Term	Number of students: Second Term	Number of students: Third Term
*RHETORIC AND ENGLISH LANGUAGE. — Concluded.									
Rapid Writing (55) (56)	1	1		4	4		33	33	
Brief Making and Argument (57)	3						23		
Short Stories (60)		2						21	
Poetics (59)	2						16		
Studies in Exposition (58)		3						18	
Rhetorical Theory & Criticism (61) (62)	2	2		10	10		14	11	
Teacher's Course (67) (68)	2	2					47	40	
History of the Engilsh Language (69)	2						58		
Old English (71) (72)	2	2					25	22	
Middle English Philology (73)	2						7		
Historical English Grammar (74)		2						5	
Development of Prose (70)		2						40	
Extempore Speaking (75) (76)	2	2					22	19	
*ROMANCE LANGUAGES.									
FRENCH									
Elementary French (1) (51)	16						173		
Modern Prose and Plays (1) (52)		16						140	
Modern French Literature (55) (56) (2)	8	8					71	65	
Recent French Prose Writers (58)		3						15	
Advanced Prose Composition (59) (60)	1	1					12	11	
French Comedy (57)	3						16		
French Seminary (63) (64)	3	3					10	8	
Thesis and Similar Work				2	2				
Scientific French (53) (3) (54)	2	2					16	9	
SPANISH									
Grammar and Readings (51) (52)	2	2					15	16	
VETERINARY MEDICINE.									
Anatomy (28)	5						17		
General Pathology (29)		5						17	
Special Pathology (30)			5						17
General Surgery (24)				10	10		6	6	
Clinic (19)				12	12	12	11	11	13
Special Pathology (20) (21)	5	3					9	9	
General Therapeutics (22)			5						6
Lectures and General Pathology (14)	5						13		
Osteology (11)	5			10			7		
Meat Inspection (27)	5						9		
Special Pathology (15) (16)		5	5					10	9
Diseases of the Cow (17)		3						22	

* Semester work.

TABLE I — THE WORK OF INSTRUCTORS, 1899–1900 — Concluded.

Subjects	Hours per week						Number of students		
	Lectures			Laboratory					
	First Term	Second Term	Third Term	First Term	Second Term	Third Term	First Term	Second Term	Third Term
VETERINARY MEDICINE — Concl'd.									
Surgcial Diseases and Operations (18)	5	5					6	5	
Myology (12)		5			10			6	
Neurology (13)			5						6
Principles of Horse-shoeing (26)			5						7
Obstetrics (23)		3	3		2			12	6
Canine Disease (31) (32)	5	3					8	8	
Opthalmology (33)		2	2					9	6
ZOOLOGY.									
Comparative Zoology (1, 51, 52)	4	4	4	8	8	8	86	80	80
Com. Anatomy of Vertebrates (53, 55)	1			12			10		
Com. Anatomy of Vertebrates (54, 56)		1			12			6	
Zoology and Anatomy (58, 60)					10			5	
Economic Entomology (4)	2	2	2				12	11	11
Systematic and Practical Entomology (7)			3						11
Comparative Zoology (64)		2			4			23	
Zoology (57)				6			5		
Zoology (65)				4	4		2	2	

TABLE II — SHOWING THE WHOLE NUMBER OF DEGREES IN COURSE CONFERRED SINCE THE FOUNDING OF THE UNIVERSITY.

	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Bachelor of arts	1	1	6	2	2	1	5	4	6	8	6	1	7	2	6	9	12	19	13	17	18	8	14
Bachelor of philosophy	..	..	..	2	..	2	2	1	1	2	6	7	4	8	8	5	5	19	26	27	27	31	38
Bachelor of science	5	5	1	2	5	3	2	4	2	4	4	8	2	10	7	11	7	9	4	10	10	2	7
Bachelor of science in agr	..	..	..	..	..	..	..	1	1	..	..	..	2	3	3	..	..	2	4	4	5	5	7
Bachelor of science in chemistry	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					1	1
Bachelor of science in Dom. Sci.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					..	1
Bachelor of science in H., F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	1	2	1	1
Bachelor of Science, Ind. Arts	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			1	1	..	
Bachelor of science in Pharmacy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					..	1
Civil engineer	..	..	..	..	..	1	1	1	3	3	4	1	2	2	7	9	7	9	11	4	8	7	3
Mechanical engineer	..	..	1	..	2	4	1	3	1	2	4	2	3	2	5	2	1	2	4	9	5	6	9
Electrical engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	9	8	15	17	13	10	7	11
Engineer of mines	..	..	1	1	..	..	1	2	4	1	4	2	..	..	1	1	4	1	6	3	2	3	3
Engineer of mines, in Ceramics	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..					..	1
Graduate in pharmacy	..	..	..	..	..	..	..	..	..	3	..	2	3	6	5	5	3	11	12	11	7	..	
Master of pharmacy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		1		1	..	
Doctor of veterinary medicine	..	..	..	..	..	..	..	..	..	1	..	1	4	..	4	5	..	4	2	3		..	4
Master of arts	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	..	..	2		4	4	3	8
Master of science	..	..	..	1	..	..	..	..	..	..	..	1	1	2	2	..	2		3	3	2	3	2
Master of agriculture	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2		1	..	
Master of Science in H. & F.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			1	1	1	
Doctor of philosophy	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1					..	
Doctor of science	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1		1		..	
Bachelor of laws	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	18	15	16	6	23	22	21	25
Master of laws	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	2		6			..	
Totals	6	7	9	8	9	11	12	16	18	24	28	26	30	36	65	79	70	112	118	135	126	99	137

TABLE III — SHOWING THE NUMBER OF STUDENTS IN THE GENERAL TECHNICAL AND PROFESSIONAL COURSES.

	1890–91.	1891–92.	1892–93.	1893–94.	1894–95.	1895–96.	1896–97.	1897–98.	1898–99.	1899–1900.
General Courses (College of Arts)	137	151	194	245	256	322	327	358	371	419
Technical Courses (other Colleges except Law)....	166	259	381	368	424	453	453	511	547	603
Professional Courses (College of Law).....		55	67	72	65	100	132	148	191	201
*Graduate students and summer school	2			1		94	97	133	75	45
Totals	305	465	642	686	745	969	1,019	1,150	1,178	1,268

* Until 1896, graduate students have been included in the first three classes.

REPORT OF THE LIBRARIAN.

Dr. W. O. Thompson, President Ohio State University,

DEAR SIR:—The following report on the condition of the university library is herewith respectfully submitted:

BUILDING AND EQUIPMENT.

The library has this year occupied the entire east end of Orton Hall and the room formerly used as a faculty room in university hall. The room in university hall has been used for the law library. It has been too small to accommodate properly the law students, and it is earnestly recommended that before the opening of the university next fall another and larger room be provided for these books.

The removal of the law lecture room from the first floor of Orton Hall and the tearing down of the temporary partition which divided it from the library has been of the greatest advantage to the work of the library. This change has made possible a complete rearrangement of the books and papers kept on the first floor. The main room is 70′ x 40′ in size. In the southwest corner there has been provided a temporary work room for the preparation of books for binding, the southeast corner having cases for unbound papers and magazines. The central part is used for the filing of state and municipal documents and the entire north end is devoted to U. S. government documents. In all three parts of the room space has been left for reading tables, and there is no room in the library where more important work is done by students.

The removal of the law books from the balcony has given room for growth in the classes of science and engineering. The books were not rearranged this year, but the entire balcony arrangement will probably be changed by the beginning of next year. This will necessitate the return to the main library of the oak cases taken to the law library. By the removal of the books on geology to the balcony, room is gained on the main floor for one more reading table.

Special credit is given to Mr. McCracken for his solution of the problem of providing light for the tables. By dropping lamps from the ceiling the proper light has been secured, together with freedom in rearrangement of tables, and without the disadvantage of cutting the cork carpet in order to bring the wires up from the floor.

There is still room in the main library for a year's increase in books without encroaching upon the reading room space. Year after next it

will undoubtedly be necessary to put in more cases which will, of course, mean fewer tables. *And this year's use of the library has demonstrated the fact that the reading rooms are already too small.* The problem of how to meet the demands which are certain to be made on the library before there is any possibility of finding relief in a new building, promises to be a very difficult one to solve,—if indeed there can be any solution. The prospects are only too sure that within the next two years, and certainly before three years have expired—which time seems to be the very earliest at which there can be hope of having a new building completed—the library will have to ignore many crying demands because of lack of room.

Such conditions make it imperative that everything be done to secure a library building at the earliest possible moment. To that end the librarian is already engaged in the comparative study of college library buildings. By such a study only can the danger of erecting a building, unsuited to its purpose in some particulars, be minimized. In May of this year a visit of inspection was made to the library of the University of Illinois. The new library building of Princeton University ought to be visited as early next year as possible.

BOOKS.

The number of books recorded on the accession books of the library June 30th, 1900, is 35,430. These records show that 7,443 have been added within the last year. As a matter of fact about half of this number were received in the library before the close of last year, but were not recorded because of lack of help and lack of room. Most of these were the U. S. public documents, the gift of which was noted in last year's report. Of all the additions to the library, none has been more valuable than these public documents. Another installment of about six hundred volumes came from Washington in the early spring of this year, after Captain Cope had personally visited the document office and had secured the personal influence of Mr. Ferrel, the superintendent of documents. Between five hundred and six hundred more are expected in the fall when they are returned from Spain by the U. S. Minister. It is a matter of special congratulation that the university was given the first chance of securing these books at the small expense of paying the transportation across the ocean. This is undoubtedly due to the efforts of Captain Cope in securing the interest of Mr. Ferrel.

State and municipal documents are being received constantly, and form a very important part of the library. It has been a source of gratification to the librarian to notice that since the special work in public documents was undertaken in the university library other libraries have begun to see the necessity of having special assistants in charge of this work. The claim is not made that this is due to the uni-

versity's action, but it shows that it is beginning to be recognized that document work is an important line of library activity.

A comparatively large number of gifts have come to the library from private sources. A list of donors accompanies this report.

Special mention should be made of a gift relating to the history of the Quakers in America. Through the interest and active effort of Mr. J. J. Janney of this city, the Miami Quarterly Meeting of the Society of Friends in Ohio has donated a collection of books illustrative of the influence of the Quakers in American history, and especially during the colonial period. When completed the collection will have cost one hundred and fifty dollars, and will be of the highest service as it touches a field of American history in which our library was seriously deficient. In addition, Philadelphia Yearly Meetings of both branches of the Society of Friends have donated a considerable number of volumes of historic and doctrinal character, thus supplementing the gift of the Miami Quarterly Meeting.

Mention has been made in previous reports of the gift of the books from the library of Mr. Wm. Siebert. Most of these books have now been received. In addition to these, there have been purchased by Mr. John Siebert and Mr. Louis Siebert over four hundred dollars' worth of books on German history. These will form the more important part of the "Siebert Library of German History," as the collection is to be called. It is understood that one hundred dollars a year will be furnished by each of these gentlemen for keeping up purchases in this line. None of these books have yet been entered on the library records, since it was desired to wait until all the books had been received, before recording them or putting them on the shelves for use.

Many of the books received from Mr. Wm. Siebert's library have no bearing at all on German history and it is definitely understood that these books, after being duly marked as having been received from him, are to be placed in those parts of the library where they naturally belong. This is the only safe principle to follow in accepting gifts for a library, and should be carefully adhered to. Books on a special subject are naturally kept together so that special collections can well be known by their collector's name, but it should never become a practice to accept libraries composed of books on miscellaneous subjects with the understanding that the books are to be kept together. If that were to be done the university library would soon be in a condition similar to that in which a neighboring college found itself when Wesley's sermons could be found in any part of the room.

During the year circulars have been sent out by the alumni association to alumni residents in Ohio, calling attention to the needs of the library. A copy of the circular is attached to this report.

In the annual report of last year it was said that the chief duty of a university library was "to secure books, more books, and always more

books." This statement should be repeated this year with even greater emphasis.

USE.

It is a pleasure to report that the use of the library has increased much more rapidly than has the student body, thus showing that the library is performing a more important part in the educational work of the university.

The great aim of the library is to teach the students the use of books, and all the reference work is directed towards the end of helping the student help himself. Much more time is required for this instructional work than would be used in simply supplying the books or information needed.

It was found necessary this year to place on special shelves the books reserved by professors for required reading. These shelves were not open to the students and each book was taken out on a special card for use in the reading room. Next year it will probably be necessary to limit the time during which one student can use the book, because of the large number of students dependent on one book, the library having very few duplicates.

STAFF.

There has been no change in the library staff during the year. Miss Townshend, Miss Kellicott, Miss Jeffrey, Miss Allen and Mr. Guittard all have retained their positions with very few changes in the work for which each is held responsible.

Very respectfully,

OLIVE JONES, Librarian.

REPORT OF THE TREASURER.

COLUMBUS, OHIO, *June 30th, 1900.*

To the HONORABLE J. MCLAIN SMITH, *President Board of Trustees of the Ohio State University*:

SIR: — I hand you herewith my annual report for the fiscal year ending the 30th day of June, 1900. This report is accompanied by proper vouchers for all disbursements.

Respectfully,

L. F. KIESEWETTER, *Treasurer.*

STATEMENT I.

DETAILED STATEMENT OF RECEIPTS BY L. F. KIESEWETTER, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1900.

Date	From whom received	For what purpose	Amount	Total
1899				
July 3	F. W. Prentiss, Treas. O. S. U.	Balance on hand from former treasurer		$9,088 04
7	Geo. B. Kauffman	Sale store room cards	$111 59	
	Geo. B. Kauffman	Merchandise	152 07	
	U. S. Treasurer	Annuity act of Aug. 30, 1890	25,000 00	
	M. F. Early and Jane Beal	Deed act of March 14, 1889	2 00	
	Alfred H. Barnes	Deed act of March 14, 1889	2 00	
	Louisa M. Byers	Deed act of March 14, 1889	2 00	25,269 66
Aug. 9	B. F. Thomas	Ninth and tenth installm't rent 1898-9	85 00	
	Margaret L. Hurles	Deed act of March 14, 1889	2 00	
	Thomas Cloud	Deed, act of March 14, 1889	2 00	89 00
Sept. 20	Commrs. Sinking Fund.	Int. on endowment	5,000 00	
	Henry C. Lord	Scrap copper sold	4 25	
	B. F. Carmean	Deed, act March 14, 1889	2 00	
	R. W. Funk	Dorm. fee, Mr. King	1 50	
	E. E. Harrold, storekpr.	Sale of 100 storeroom cards	500 00	
	L. H. Godman	Unpaid fees of last year	7 50	5,515 25
23	E. E. Harrold, storekpr.	Sale of 100 storeroom cards	500 00	
	Nat. Brick Mfrs. Assn.	Endowment scholarship in ceramics	250 00	
	E. E. Harrold, storekpr.	Sale of 80 storeroom cards	400 00	1,150 00
Oct. 20	B. F. Thomas, Secy.	Amt. retd. of sub. to A. A. A. S.	188 51	
	Alexis Cope, Bursar	Students' fees	13,700 00	
	Commrs. Sinking Fund.	Int. on endowment	5,000 00	18,888 51
Nov. 10	Auditor of State	Req. No. 25, O. S. U. fund	14,956 67	
	Auditor of State	Req. No. 26, O. S. U. fund	33,437 50	
	Honline & West	Freight paid by mistake	8 70	
	Martha Loister	Deed, act March 14, 1889	2 00	
	Margaret Shough	Deed, act March 14, 1889	2 00	
	Joseph Smith	Deed, act March 14, 1889	2 00	
	S. G. Lindsay	Deed, act March 14, 1889	2 00	
	Gen. Elec. Co.	Credit on account	2 00	48,412 87
Dec. 1	Ohio Nat'l Bank	Proceeds sale 30,000 refunding bonds sold Nov. 9, 1899		32,705 00
7	Commrs. Sinking Fund.	Int. on endowment		3,500 00

STATEMENT I — Continueu.

Date	From whom received	For what purpose	Amount	Total
1899				
Dec. 15	Auditor of State.....	Req. No. 27, O. S. U. fund		15,110 00
	E. E. Harrold, storekpr.	80 coupon cards sold to students	400 00	
	Benj. F. Thomas.....	1st and 2nd installments rent, 1899–1900	85,00	
	Geo. B. Kauffman.....	Ninth and 10th installment rent, 1898–1899; 1st, 2nd & 3rd 1899–1900	225 00	
	Alexis Cope, Bursar....	Students' fees	200 00	
	Nora Heath.....	Deed, act of March 14, 1889	4 00	
	Alexis Cope, Bursar....	Fees 38 auditor's tickets	38 00	952 00
20	L. H. Houston.....	Deed, act of March 14, 1889	2 00	
	Emerson McMillin.....	Fellowship in astronomy	90 00	
	Emerson McMillin.....	Scholarship in economics	100 00	192 00
21	M. P. Post.....	Freight and cartage paid for him.....	1 25	
	F. E. Sanborn.....	Freight and cartage paid for him.....	20 54	
	Alexis Cope, Bursar....	Students' fees	294 63	316 42
30	Commrs. Sinking Fund.	Interest on endowment		3,093 50
1900				
Jan. 11	Auditor of State.....	Req. No. 28, O .S. U. fund		14,987 06
Feb. 3	Neal Postlewaite.....	Diploma fee, class of 1899	5 00	
	Paul System Co.....	Credit on account...	49 54	
	W. H. Scott.....	Laboratory fees, summer school ...	14 00	
	E. A. Hitchcock.....	Fee for testing boilers	10 00	
	C. W. Mesloh.....	7th, 8th, 9th & 10th installment rent, 1898–99; 1st & 2nd, 1899–1900	108 00	
	Alexis Cope, Bursar....	Students' fees	4,500 00	
	Commrs. Sinking Fund.	Interest on endowment	5,500 00	10,186 54
23	Auditor of State.....	Req. No. 30, O. S. U. fund	4,474 17	
	Alexis Cope, Bursar....	Students' fees	8,500 00	
	J. W. Stimson.....	Damage to property.	1 00	12,975 17
Mar. 9	Auditor of State.....	Req. No. 29, O. S. U. fund		15,037 72
30	Commrs. Sinking Fund.	Interest on endowment	2,750 00	
	Alexis Cope, Bursar....	Students' fees	3,800 00	
	B. F. Thomas.....	3rd, 4th, 5th & 6th installments rent, 1899–1900	170 00	
	Alexis Cope, Bursar....	Students' fees	200 00	
	Buckeye Engine Co.....	Sale of old engine...	450 00	
	F. E. Kester.....	Sale 3 bamboo rods..	15	

STATEMENT I — Concluded.

Date	From whom received	For what purpose	Amount	Total
1900				
	W. G. Pengelly.....	Pictures of Dr. Orton	17 50	7,387 65
April 4	Auditor of State.....	Req. No. 31, O. S. U. fund		15,166 74
25	Auditor of State.....	Req. No. 32, O .S. U. fund		15,146 17
May 18	Auditor of State.....	Req. No. 33, O. S. U. fund		14,981 06
	Auditor of State.....	Req. No. 34, O. S. U. fund		7,875 00
22	Geo. B. Kauffman.....	Rent	180 00	
	E. E. Harrold.....	Store room cards....	400 00	
	Lewis Merriman.....	Deed, act Mar. 14, 1889	2 00	
	Edw. Orton, Jr.....	Printing memorial ..	19 00	
	W. H. Kinnear.....	Deed, act Mar. 14, 1889	2 00	
	Wm. T. Magruder.....	Use of machinery...	12 30	
	Wm. T. Magruder.....	Broken tools	12 76	
	W. H. Scott.....	Lub. oil and deodorizer	34	628 40
31	Ohio National Bank....	Sale of $10,000 refunding bonds		10,906 00
June 7	C. W. Mesloh.....	1st, 2nd, 3rd, 4th, 5th, 6th installments rent, 1899–1900		108 00
	Edward Orton, Jr.....	Sales of material....	50 00	
	Commrs. Sinking Fund.	Interest on endowment	6,500 00	
	M. P. Post.....	Test in dept. ceramics	1 25	6,551 25
13	Auditor of State.....	Req. No. 35, O. S. U. fund		14,904 06
27	Commrs. Sinking Fund.	Interest on W. J. Bryan fund	8 15	
	Commrs. Sinking Fund.	Interest on endowment fund	1,860 72	1,868 87
	J. A. Bownocker.....	Comm'c't luncheon	59 00	
	E. A. Eggers.....	Rent to June 1, 1900	150 00	
	F. E. Sanborn.....	Sale of scrap iron..	36 74	
	Alexis Cope, Bursar....	Diploma fees	735 00	
	Alexis Cope, Bursar....	Students' fees	665 12	
	Alexis Cope, Bursar....	Auditor's tickets	30 00	1,675 86
30	Alexis Cope, Bursar....	Storeroom cash sales and cards		950 00
	Total			$315,617 80

STATEMENT II.

DETAILED STATEMENT OF DISBURSEMENTS BY L. F. KIESEWETTER, TREASURER, DURING FISCAL YEAR ENDING JUNE 30, 1900.

Date	To whom paid	For what purpose	No	Amount
1899				
July 1	J. McLain Smith	Expenses as trustee	1	$5 95
	T. J. Godfrey	Expenses as trustee	2	25 95
3	Wm. Cannan	Labor	3	11 27
	Kuhn Artificl. Stone Co.	Cement walk (balance) due on contract	4	380 00
	Jno. T. Mack	Expenses as trustee	5	18 50
5	Columbus Gas Co.	Gas	6	66 89
6	Hutton Bros.	Painting	7	12 00
	Buckeye H. and L. Co.	Leather	8	80
	Blackwood Green & Co.	Repairs	9	3 90
	J. S. Abbott & Co.	Glass	10	2 00
	Fish Stone Co.	Stone work	11	10 00
	Fitzpatrick & Hoepfner.	Closet bowl	12	8 55
	F. E. Fleischer	Labor	13	18 25
	J. C. Perry	Labor	14	4 23
	Peter Henderson & Co.	Lawn mower	15	12 00
	Krauss, B B. & Co.	Tin roller	16	8 40
	Eimer & Amend	Scientific apparatus	17	20 00
	B. F. Thomas	Cash advanced	18	15 01
	West'h'se E. & Mfg. Co.	Repairs	19	4 00
	Wards Nat Sci. Est.	Lenckhart charts	20	42 00
	Glouster Net & Tw. Co.	Seine	21	9 50
	J. S. Teeter	Labor	22	30 00
	Wm. Roberts	Labor	23	35 00
	E. Doddington & Co.	Lumber	24	2 10
	J. S. Schofield	Paint	25	4 25
	Sherwood Mfg. Co.	Repairs	26	6 00
	Murphy Iron Works	Pins	27	4 50
	W. H. Case	Labor	28	30 00
	E. Harrington Son & Co.	Chain	29	18 77
	H. Mithoff & Co.	Strainer cloth	30	95
	Columbus Brass Co.	Castings	31	18 00
	W C. McCracken	Cash advanced	32	2 00
	New Col. Bridge Co.	Beams, rods, etc.	33	35 73
	B. D. Potts	Hardware	34	4 63
	Palmer & Beck	Repairs	35	50 85
	Lawrence Press Co.	Printing	36	4 50
	C. V. Brown	Advertising	37	5 00
	C. L. Kelly	Advertising	38	4 00
	J. L. Trauger	1200 copies Bot. Bulletin No. 1	39	81 20
	J. N. Bradford	Cash advanced	40	13 20
	McClelland & Co.	Ink	41	1 80
	Drawing Supply Store.	Supplies	42	3 30
	J. M. & W. Westwater.	Electric supplies	43	6 10
	General Electric Co.	Electric supplies	44	52 00
	F. A. Fish	Labor	45	12 00
	J. C. Covan	Labor	46	7 02
	P. Hayden S. Hdw. Co.	Castings	47	69 20
	Western Elictric Co.	Electric supplies	48	41 39
	Schilling Foundry Co.	Castings	49	12 08
	Shoedinger, Fearn & Co.	Bolts, etc	50	74
	J. G. Biddle	Scientific apparatus	51	46 85
	J. B. Colt & Co.	Magic lantern	52	30 00
	F. C. Caldwell	Cash advanced	53	31 12
	Philip Long	Commencem' luncheon and cafe partitions	54	350 00
	Mrs. Edith R. Hubler.	Extra service as clerk	55	8 55

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
July 6	Western Electric Co....	Telegrams	56	$4 23
	Tracy Wells Co.....	Jap rods	57	2 75
	R. E. McIntosh.....	Labor	58	10 80
	M. C. Hunter.....	Labor	59	14 32
	H. C. Nidy.....	Labor	60	4 65
	Frankenberg Bros.....	Mailing tubes	61	1 00
	Cherington P. & E. Co.	Rubber stamps	62	75
	Green, Joyce & Co.....	Bunting	63	10 99
	Central Union Tel. Co..	Telephone messages	64	2 50
	Hann & Adair.....	Printing	65	15 70
	Paul Jones	Expenses as trustee.....	66	1 00
	Chas. T. Howe.....	Music for commencem't	67	29 00
	Z. L. White & Co.....	Cheese cloth.....	68	1 82
	L. B. Wing.....	Expenses as trustee.....	69	5 00
	Columbus Supply Co...	Hardware	70	61 74
	Col. Mill & Mine S. Co.	Hardware	71	65 17
	Mrs. A. Farnham.....	Brushes	72	9 00
	Florence Bell.....	Clerical work	73	1 65
	Grace Eagleson.....	Clerical work	74	8 43
	A. W. Livingston's Sons	Flowers	75	18 75
	G. N. Carman, Treas...	Membership N. C. A. C. and S. S.....	76	3 00
	American Dist. Tel. Co.	Watch boxes	77	27 00
	S. M. Tracy.....	Plants	78	46 20
	W. A. Kellerman.....	Cash advanced	79	13 59
	Freda Detmers.....	Labor	80	25 00
	L. C. Riddle.....	Labor	81	58 05
	W. H. Anderson.....	Books	82	405 25
	Howald & Conklin.....	Tin rollers	83	5 10
	Erner & Hopkins.....	Electric apparatus	84	124 03
	Tallmadge Hdw. Co....	Hardware	85	5 72
	H. Cole Co.....	Cross section paper.....	86	7 40
	Eagle Lock Co.....	Locks	87	11 00
	Library Bureau.....	Outfit	88	2 75
	W. T. Magruder.....	Cash advanced	89	18 28
	Blackwood, Green & Co.	Paint	90	17 55
	Geo. Trowbridge.....	Carpentry	91	2 00
	Keuffel & Esser Co.....	Tapes	92	5 36
	Star Milk Cooler Co....	Cooler	93	24 00
	L. Hoster Brewing Co..	Sprouts	94	9 88
	John Immel & Son.....	Repairs	95	18 80
	Yardley & Harsh.....	Pail	96	1 50
	Nitschke Bros	Office supplies	97	12 33
	Central Ohio Paper Co.	Paper	98	10 50
	A. H. Barber Mfg. Co.	Ammonia	99	6 98
	Capital City Mach. Wks.	Machinery and castings	100	103 88
	R. J. Seymour.....	Messenger service	101	7 00
	Champlin Printing Co..	Printing	102	135 50
	Columbus Transfer Co..	Coupe services	103	7 00
	J. C. Porterfield	Basket ball	104	6 00
	Franklin Toilet Sup. Co.	Laundry	105	10 16
	Engelke & Bigelow.....	Freight and draying...	106	39 83
	Murray City Coal Co...	Coal	107	82 78
	Frank L. Sikes.....	Costs O. S. U. vs. Cup-pett & Webb.....	108	31 56
	John Wanamaker.....	Books	109	4 89
7	Columbus Street Ry. Co.	Street car tickets.....	110	5 00
29	C. B. Guittard.....	Salary, June, 1899.....	111	50 00
	Alexis Cope.....	Salary, July, 1899.....	112	187 50
	C. E. Barnet.....	" "	113	65 00
	Jean Blackford.....	" "	114	54 17

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
July 29	Edith D. Cockins.....	Salary, July, 1899.....	115	$58 33
	Dennis Clifford	" "	116	45 00
	James Kelley	" "	117	25 00
	Mrs. Edith R. Hubler..	" "	118	33 33
	Frank Ruhlen	" "	119	60 00
	F. K. Luke.....	" "	120	50 00
	J. F. Cunningham.....	" "	121	50 00
	A. F. Hall.....	" "	122	60 00
	A. G. McCall.....	" "	123	20 00
	W. C. McCracken.....	" "	124	150 00
	C. M. Low.....	" "	125	54 17
	Wm. Standley	" "	126	50 00
	B. LeBay	" "	127	50 00
	G. A. Rose.....	" "	128	65 00
	A. Chantler	" "	129	40 00
	G. A. Goodspeed.....	" "	130	40 00
	J. H. Brown.....	" "	131	40 00
	D. D. Geren.....	" "	132	40 00
	W. Whitestine.....	" "	133	40 00
	H. Chantler.....	" "	134	40 00
	G. C. Denny.....	" "	135	40 00
	W. N. Cook.....	" "	136	40 00
	W. Townsel.....	" "	137	25 00
11	Laning Printing Co....	Bal. due for ptg. cat....	138	35 00
15	J. McLain Smith.....	Exp. m't'g com. July 14, 1899	139	7 21
17	H. W. Johns Mfg. Co..	2-30 bbl. red roof paint	140	47 42
24	Olive B. Jones.....	1-10 sal. yr. end'g. June 30, 1900	141	135 00
29	C. H. Woodruff.....	Sal. as carp. July, 1899	142	60 00
	Jos. Garretson	Salary for July, "	143	35 25
Aug. 1	T. J. Godfrey.....	Expenses as trustee....	144	8 55
	R. M. Rownd.....	Postage	145	15 00
	L. B. Wing.....	Expenses as trustee.....	146	5 25
	Webb Sta. & Print. Co.	Stationery, etc.....	147	28 35
	Cherington P. & E. Co.	Stamps	148	4 00
	A. N. Marquis & Co....	Book	149	2 94
	Champlin Printing Co..	Printing	150	44 25
	Ruggles-Gale Co	Blank book	151	9 00
	Central Union Tel. Co..	Telephone service	152	72 75
	Manufac's' O. & G. Co.	Lard	153	14 82
	Grace Eagleson	Clerical work	154	3 60
	Tracy-Wells Co	Sundries	155	20 97
	American Dist. Tel. Co.	Messenger service	156	85
	R. J. Seymour.....	" "	157	20 25
	Frank Huddleson	" "	158	1 18
	Thos. F. Hunt.....	Exps. to San Francisco	159	126 25
	Columbus Bnk. Note Co.	Stationery	160	37 50
	A. H. Smythe.....	Office supplies	161	1 35
	Berlin Printing Co.....	Printing	162	4 50
	Erner & Hopkins.....	Electric supplies	163	1 95
	American Sand Co.....	Sand	164	54 10
	Marion Peck	Labor	165	36 00
	Thos. Boude	"	166	22 50
	W. H. Case.....	"	167	37 50
	Waters Governor Co...	Valve	168	16 66
	McCabe Hang. Mfg. Co.	Bolts	169	18 00
	West. Kieley S. S. Co..	Valves	170	72 00
	Wheeler C. & Eng. Co.	Tubes	171	8 25
	Bourne & Know's M. Co.	Gaskets	172	23 95
	New. Col. Bridge Co...	Iron	173	85 58

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Aug. 1	Adams-Bagnall El. Co.	Arc lamps	174	$200 00
	West'gh'se El. Mfg. Co.	Electric machinery	175	500 00
	McDonald Bros	Cesspool	176	60
	Kelton & Converse	Lumber	177	47 21
	J. C. Howard	Painting, etc	178	92 00
	Frank Watkins	Painting	179	295 00
	Columbus Sewer P. Co.	Flue lining	180	2 22
	A. F. Fenstermaker	Painting	181	83 00
	Columbus Brass Co.	Water closets	182	119 75
	J. W. Cawthon	Carpentry	183	15 75
	J. W. Schneider	"	184	15 75
	M. B. Geary	"	185	14 50
	Eli Hiatt	"	186	15 75
	J. S. Abbott & Co.	Glass	187	16 75
	A. S. W. Huffman	Plumbing	188	40 22
	Harper's Illus. Syndicate	Advertising cuts	189	17 20
	Champlin Printing Co.	Printing	190	64 25
	Oberlin Annual	Advertising	191	10 00
	S. C. Derby	Cash advanced	192	69 25
	J. C. Perry	Labor	193	10 53
	F. E. Fleischer	"	194	25 28
	Murray City Coal Co.	Coal	195	10 93
	L. L. Hill	Clerical work	196	13 00
	Standard Disinfect. Co.	Sheep dip	197	2 50
	Warren & S'th'k C. Co.	Repairs	198	9 00
	A. A. Hall	B'd'g and breeding cows	199	32 00
	Blackwood, Green & Co.	Hardware	200	41 92
	Jacob Weisheimer	Corn	201	22 35
	Glucose Sugar Ref. Co.	Gluten meal	202	19 50
	Nitschke Bros	Envelopes, etc	203	5 15
	Kemp & Burpee Mfg. Co.	Repairs	204	4 30
	Franklin Toil. Sup. Co.	Laundering	205	2 11
	Capital City Mach. Wks.	Tools and machinery	206	7 35
	John Immel & Son	Repairs	207	9 10
	W. O. Thompson	Expenses as president	208	70 20
	Creamery Pack Mfg. Co.	Dairy supplies	209	81 31
	W. H. Siebert	Model of brain	210	10 00
	Clara Armstrong	Labor on herbarium	211	9 15
	Karl Kellerman	" "	212	4 50
	L. C. Riddle	" "	213	28 05
	Payne, McD. Hdw. Co.	Hardware	214	21 13
	Lena Dennis	Labor	215	5 00
	Central Ohio Paper Co.	Paper	216	37 80
	W. A. Kellerman	Cash advanced	217	49 16
	W. R. Beattie	Labor on herbarium	218	10 05
	Emma Beattie	" "	219	24 60
	Harriet G. Burr	" "	220	11 70
	Edna Armstrong	" "	221	24 60
	Freda Detmers	" "	222	8 10
	J. H. Randall	Carpentry	223	52 75
	James Penn	Hauling	224	2 75
	Mabel Huddleson	Work in library	225	4 00
	A. F. Fenstermaker	Decorating rooms	226	50 00
	Wm. Burdell, Jr.	Roll and truss	227	4 25
	Hann & Adair	Printing	228	13 15
	Schoedinger, F. & Co.	Tools	229	2 80
	Geo. D. Cross Lum. Co.	Lumber	230	32 52
	D. S. White	Cash advanced	231	11 00
	T. L. Griffin	Clerical work	232	30 00
	W. H. Hoskins	Advertising	233	8 75
	Wm. Burdell, Jr.	Turf goods	234	12 60
	Tallmadge Hardware Co.	Hardware	235	7 48

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Aug. 1	Columbus Supply Co...	Hardware supplies.....	236	$419 14
	H. Braun Sons & Co...	Drugs & surg. inst'm't's	237	16 83
	Bausch & Lomb Opt. Co.	Optical parts	238	2 88
	E. L. Moseley.....	Bird skins.....	239	58 30
	Bauer & Baumeister....	Repairs	240	3 50
	Col. Mill & Mine S. Co.	Hardware	241	58 80
	Engelke & Bigelow.....	Freight and draying...	242	33 04
	Fred J. Heer.....	Catalogues	243	240 00
	Bucher Engraving Co..	Printing	244	96 82
	A. A. Griffing Iron Co	Radiators	245	61 01
	J. P. Covan.....	Labor	246	55 25
	Columbus Gas Co.....	Gas	247	52 43
	Lutheran Book Concern.	Paper & covers for cat.	248	75 00
	R. M. Rownd, P. M....	Postage	249	20 00
15	James B. Loff.....	Labor	250	6 60
16	R. M. Rownd, P. M....	Postage	251	16 00
22	W. O. Thompson.....	Salary, August, 1899...	252	416 67
	Alexis Cope	Salary August 1899.....	253	187 50
26	C. E. Barnet.....	" "	254	65 00
	Jean Blackford	" "	255	54 17
	W. C. McCracken.....	" "	256	150 00
	J. Covan	" "	257	70 00
	G. A. Rose.....	" "	258	65 00
	F. Ruhlen	" "	259	60 00
	A. F. Hall.....	" "	260	60 00
	Edith D. Cockins.....	" "	261	58 33
	C. M. Low.....	" "	262	54 17
	F. K. Luke.....	" "	263	50 00
	J. F. Cunningham.....	" "	264	50 00
	W. Standley	" "	265	50 00
	B. LeBay	" "	266	50 00
	A. Chantler	" "	267	40 00
	G. A. Goodspeed.....	" "	268	40 00
	J. H. Brown.....	" "	269	40 00
	D. D. Geren.....	" "	270	40 00
	W. Whitestine	" "	271	40 00
	H. Chantler	" "	272	40 00
	G. C. Denny.....	" "	273	40 00
	M. N. Cook.....	" "	274	40 00
	W. Townsel	" "	275	25 00
	James Kelley.....	" "	276	25 00
	Mrs. E. R. Hubler.....	" "	277	33 33
	A. G. McCall.....	" "	278	20 00
	Dennis Clifford	" "	279	8 71
	E. M. Smothers.....	" "	280	20 32
	Benj. Irwin	" "	281	15 97
	Joe. Garretson	" "	282	40 50
25	Charles Woodruff	September wages	283	53 50
26	Clinton Schaeffer.....	Carpentry	284	18 00
	J. W. Schneider.....	"	285	38 75
	M. B. Geary.....	"	286	11 75
	Eli Hiatt	"	287	38 75
	J. W. Cawthon.....	"	288	38 75
	William Bechel	"	289	18 00
	C. H. Woodruff.....	Salary as carp. Aug. '99.	290	65 00
Sept. 5	L. B. Wing.....	Expenses as trustee.....	291	2 00
	T. J. Godfrey.....	" "	292	5 00
	Von Gerichten A. G. Co.	Glass	293	20 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 5	A. H. Andrews & Co..	Slating	294	$8 00
	Wm. M. Taylor Mantel and Grate Co.....	Mantel	295	135 00
	Frank Watkins	Painting	296	65 00
	J. C. Howard.....	"	297	29 25
	Jas. S. Schofield.....	Oil	298	5 00
	A. L. Yardley.....	Screens	299	60 00
	Brust & Bauch.....	Masonry	300	42 40
	Columbus Brass Co....	Castings	301	98 83
	The Hanna Pt. Mfg. Co.	Bronze	302	5 85
	T. S. Edgington.....	Papering	303	15 00
	Western Kieley S. S. Co.	Traps and valve.....	304	51 75
	Lewis Fink.....	Painting	305	131 00
	J. H. Ridgway.....	Taxidermy	306	37 50
	Batterson Decor. House.	Decorating	307	248 65
	Western Union Tel. Co.	Telegraph service	308	10 48
	F. C. McKinney.....	Guide and messenger...	309	20 62
	A. G. McCall.....	Guide work	310	9 00
	H. S. King.....	"	311	5 00
	E. H. Moore.....	"	312	5 00
	K. G. Thompson.....	"	313	3 00
	M. F. Osborn.....	"	314	3 50
	H. T. Osborn.....	"	315	3 50
	Merle Rickett	"	316	3 00
	The Webb Sta. & Pr. Co.	Office supplies	317	4 30
	R. L. Polk & Co.....	City directory	318	5 00
	Central Union Tel. Co..	Telephone service	319	35
	Orvis & Marshall.....	Mimeograph ink	320	90
	D. H. Derflinger.....	Gasoline	321	3 83
	Standard Oil Co.....	Oil	322	23 32
	India Alkal Works.....	Savogran	323	18 14
	American Dist. Tel. Co.	Alarm boxes	324	32 00
	Bourne & Knowles.....	Gaskets	325	1 35
	Jos. Dixon Crucible Co.	Graphite	326	6 50
	H. Braun Sons & Co...	Lead and ammonia.....	327	1 40
	Col. Mill & Mine S. Co.	Hardware	328	10 64
	Scioto Boiler Works....	Breeching and heater...	329	137 00
	Thos. Boude	Labor	330	40 50
	M. Peck	"	331	40 50
	W. H. Case.....	"	332	39 00
	Col. Wire & Iron Wks.	Wire guards	333	31 50
	Palmer & Beck.....	Roofing, etc.....	334	173 44
	Electric Appliance Co..	Electric apparatus	335	33 70
	W. T. Magruder.....	Cash advanced	336	12 62
	Cherrington P. & E. Co.	Rubber type	337	4 60
	A. H. Smythe.....	Labels	338	85
	J. S. Maclean.....	Drawers	339	58 50
	Chas. Hall	Labor	340	1 00
	E. H. Bailey.....	Janitoring	341	25 80
	Burr Waters	"	342	9 38
	A. E. Adair.....	Masonry	343	4 05
	P. M. Griffin.....	Samples of woods.....	344	5 00
	Crosby St. G. & V. Co.	Repairs	345	29 05
	Brown & Sharpe Mf. Co.	Standard instruments ...	346	12 70
20	Columbus Supply Co...	Hardware	347	97 20
5	J. S. Maclean.....	Lumber	348	18 50
	Central Ohio Paper Co.	Paper	349	3 94
	McClelland & Co.....	Electric supplies	350	3 68
	J. G. Biddle.....	"	351	2 25
	J. P. Covan.....	Extra labor	352	6 21
	Lincoln Electric Co.....	Electric machinery	353	349 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 5	Acme Paving Co.....	Paving	354	$80 08
	Erner & Hopkins.....	Electric supplies	355	19 69
	M. P. Streett.....	Masonry	356	135 31
	Capital City Mach. Wks.	Hardware	357	36 85
	Springfield Gas Eng. Co.	Gas engine	358	150 00
	Fitzpatrick & Hoepfner.	Connecting gas engine..	359	23 63
	J. A. Brashear.....	Spectroscope	360	200 00
	J. F. Donahue & Co....	Hardware	361	6 17
	Library Bureau	Cards	362	6 00
	Schoedinger, F'rn. & Co.	Mica	363	7 88
	Bausch & Lomb Opt. Co.	Reprints	364	2 94
	Sheppard & Co.....	Labels	365	2 25
	E. T. Jenks.....	Locks	366	8 00
	Freda Detmers	Labor on herbarium....	367	10 00
	W. R. Beattie.....	"	368	7 15
	Kelton & Converse.....	Lumber	369	105 02
	Karl Kellerman.....	Labor	370	10 20
	L. C. Riddle.....	" on herbarium....	371	6 30
	Nitschke Bros	Stationery, etc.....	372	18 90
	De Laval Separator Co.	Repairs	373	3 20
	Laura L. Hill.....	Clerical work	374	14 00
	A. F. Wilcox.....	Labor	375	261 82
	Blackwood, Green & Co.	Hardware	376	108 75
	James Penn	Carting	377	27 70
	Sells & Co.....	Feed	378	15 00
	L. Hoster Brewing Co..	Sprouts	379	5 02
	A. W. Livingston's Sons.	Barley and peas.....	380	10 65
	Jacob Weisheimer	Corn	381	23 35
	Columbus Sewer P. Co.	Pipe	382	13 43
	E. D. Heller.....	Labor	383	25 37
	J. C. Perry.....	"	384	32 58
	J. H. Burgess.....	"	385	8 75
	J. Booth	"	386	15 34
	F. E. Fleischer.....	"	387	27 62
	C. Schaffer	Carpentry	388	40 25
	M. J. Snow.....	Labor	389	33 62
	A. F. Fenstermaker....	Painting, etc.....	390	157 72
	J. H. Randall.....	Carpentry	391	28 75
	O. S. Lear.....	Typewriter and neostyle	392	122 75
	Fay & Scott.....	Lathe	393	145 35
	Metta L. Seymour.....	Clerical work	394	7 25
	R. A. McClure.....	Lumber	395	131 13
	E. Kaiser	Sundries	396	1 48
	Herbert Osborn	Cash advanced	397	3 45
	Edward Orton, Sr.....	"	398	10 95
	The Fish Stone Co.....	Labor and stone.....	399	11 50
	Spahr & Glenn.....	Printing	400	2 50
	Krauss, Butler &. B. Co.	Carpets and curtains....	401	110 67
	Champlin Printing Co..	Printing	402	5 25
	Hann & Adair.....	"	403	1 85
	Lawrence Press Co.....	Vouchers	404	8 00
	Christian World Co....	Advertising	405	4 78
	Republican Publish. Co.	"	406	15 00
	O. T. Corson.....	"	407	22 50
	Moufort & Co.....	"	408	14 00
	Curts & Jennings.....	"	409	16 80
	The Interior	"	410	22 68
	Taylor, Williams & Co.	Coal	411	3 08
	Murray City Coal Co...	"	412	44 52
	E. A. Cole & Co.....	"	413	2 94
	W. F. Lavery.....	Extra services	414	27 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 5	J. L. Trauger	Binding	415	$0 64
	Keasbey & Mattison Co.	Magnabestos	416	121 74
	Engelke & Bigelow	Freight and carting	417	55 92
	E. Doddington & Co.	Lumber	418	249 26
	Tallmadge Hardware Co.	Hardware	419	123 33
	W. C. Mills	Sal., July and Aug., '99	420	70 00
	Columbus Gas Co.	Gas	421	39 00
30	W. O. Thompson	Salary, Sept., 1899	422	416 67
23	Alexis Cope	" "	423	187 50
30	C. E. Barnet	" "	424	65 00
	Jean Blackford	" "	425	54 17
	E. E. Harrold	" "	426	90 00
	T. F. Hunt	" "	427	250 00
	G. W. Knight	" "	428	250 00
	W. F. Hunter	" "	429	250 00
	A. M. Bleile	" "	430	225 00
	C. N. Brown	" "	431	225 00
	A. C. Barrows	" "	432	225 00
	R. D. Bohannan	" "	433	225 00
	B. L. Bowen	" "	434	225 00
	S. C. Derby	" "	435	225 00
	J. V. Denney	" "	436	225 00
	E. A. Eggers	" "	437	225 00
	J. P. Gordy	" "	438	225 00
13	W. A. Kellerman	" "	439	225 00
30	W. R. Lazenby	" "	440	225 00
	Wm. McPherson	" "	441	225 00
	W. T. Magruder	" "	442	225 00
	H. Osborn	" "	443	225 00
	J. R. Smith	" "	444	225 00
	W. H. Scott	" "	445	225 00
	B. F. Thomas	" "	446	225 00
	H. A. Weber	" "	447	225 00
13	N. W. Lord	" "	448	200 00
30	F. A. Ray	" "	449	200 00
	G. B. Kauffman	" "	450	200 00
	E. Orton, Jr.	" "	451	180 00
	J. N. Bradford	" "	452	180 00
	F. E. Sanborn	" "	453	180 00
	H. C. Lord	" "	454	160 00
	F. C. Clark	" "	455	160 00
	G. W. McCoard	" "	456	160 00
	C. P. Linhart	" "	457	160 00
	D. S. White	" "	458	160 00
	F. C. Caldwell	" "	459	160 00
	Edward Orton	" "	460	150 00
	E. A. Hitchcock	" "	461	150 00
	C. S. Prosser	" "	462	150 00
	W. D. Gibbs	" "	463	160 00
	P. G. Bowman	" "	464	140 00
	W. H. Page	" "	465	140 00
	W. H. Siebert	" "	466	135 00
	S. A. Norton	" "	467	120 00
	E. B. Kinkead	" "	468	120 00
	J. E. Boyd	" "	469	120 00
	C. E. Sherman	" "	470	110 00
	T. E. French	" "	471	110 00
	J. R. Taylor	" "	472	110 00
	C. W. Mesloh	" "	473	110 00
	A. W. Hodgman	" "	474	110 00
	J. H. Schaffner	" "	475	100 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 30	W. E. Henderson.....	Salary, Sept., 1899.....	476	$100 00
	J. A. Bownocker.....	" "	477	100 00
	W. A. Knight.....	" "	478	100 00
	C. L. Arnold.....	" "	479	100 00
	K. D. Swartzel.....	" "	480	100 00
23	C. B. Morrey.....	" "	481	100 00
30	W. L. Graves.....	" "	482	100 00
	C. A. Bruce.....	" "	483	100 00
	Geo. H. McKnight.....	" "	484	90 00
	Wm. Renck	" "	485	85 00
	J. S. Hine.....	" "	486	85 00
	F. L. Landacre.....	" "	487	85 00
	C. P. Crowe.....	" "	488	80 00
	A. E. Vinson.....	" "	489	80 00
23	C. P. Souther.....	" "	490	80 00
30	F. E. Kester.....	" "	491	80 00
	Mrs. Jas. A. Canfield...	" "	492	75 00
	E. O. Randall.....	" "	493	70 00
	D. F. Pugh.....	" "	494	70 00
	W. A. Landacre.....	" "	495	70 00
	W. F. Lavery.....	" "	496	70 00
	C. B. Frederick.....	" "	497	70 00
	Jno. B. Sanborn.....	" "	498	70 00
	E. E. Somermeier.....	" "	499	70 00
	T. K. Lewis.....	" "	500	60 00
	F. A. Fish.....	" "	501	60 00
	O. V. Brumley.....	" "	502	50 00
	S. W. Martin.....	" "	503	50 00
	A. V. Bleininger.....	" "	504	40 00
	J. B. Parker.....	" "	505	30 00
	Grace L. Pitts.....	" "	506	30 00
	M. Dresbach	" "	507	30 00
	D. A. Kohr.....	" "	508	60 00
	H. C. Gore.....	" "	509	30 00
	J. H. Vosskuehler.....	" "	510	30 00
	A. H. McIntire.....	" "	511	30 00
	E. L. Ball.....	" "	512	30 00
	J. W. Young.....	" "	513	30 00
	F. J. Hale.....	" "	514	30 00
	S. W. Collett.....	" "	515	25 00
	H. W. Brown.....	" "	516	25 00
	J. H. Collins.....	" "	517	20 00
	J. A. Shauck.....	" "	518	17 50
	E. H. Bailey.....	" "	519	15 00
	R. E. McIntosh.....	" "	520	12 50
	W. C. McCracken.....	" "	521	150 00
	J. P. Covan.....	" "	522	70 00
	G. A. Rose.....	" "	523	65 00
	F. Ruhlen.....	" "	524	60 00
	A. F. Hall.....	" "	525	60 00
	E. D. Cockins.....	" "	526	58 33
	C. B. Guittard.....	" "	527	55 00
	H. N. Townshend.....	" "	528	55 00
	G. S. Kellicott.....	" "	529	55 00
	M. D. Jeffrey.....	" "	530	55 00
	Lucy Allen.....	" "	531	55 00
	C. M. Low.....	" "	532	54 17
	F. K. Luke.....	" "	533	50 00
	H. C. Price.....	" "	534	50 00
	Wm. Standley	" "	535	50 00
	B. LeBay	" "	536	50 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Sept. 30	D. C. Huddleson.....	Salary, Sept., 1899.....	537	$50 00
	T. Boude	" "	538	45 00
Oct. 28	W. H. Case.....	Salary, October, 1899..	539	45 00
Sept. 30	M. Peck	Salary, Sept., 1899.....	540	40 00
	A. Chantler	" "	541	43 33
	G. A. Goodspeed.....	" "	542	40 00
	J. H. Brown.....	" "	543	40 00
	D. D. Geren.....	" "	544	40 00
	W. Whitestine.....	" "	545	40 00
	H. Chantler	" "	546	40 00
	G. C. Denny.....	" "	547	40 00
	M. N. Cook.....	" "	548	40 00
16	Dennis Clifford	" "	549	8 00
30	W. Townsel	" "	550	25 00
	J. C. Perry.....	" "	551	12 50
	Mrs. E. R. Hubler.....	" "	552	33 33
	James Kelley	" "	553	25 00
	Benj. Irwin	" "	554	45 00
	W. C. Weir.....	" "	555	20 00
	A. G. McCall.....	" "	556	20 00
	W. C. Mills.....	" "	557	35 00
9	W. C. Conklin.....	Extra jan. serv's (meeting A. A. A. S.) 18 d'ys	558	23 23
11	Edw. Orton, Pres. A. A. A. S.	Con. to exp's. of m't'g. Aug. 19–26, 1899.....	559	500 00
18	Wm. Parks	Labor	560	5 00
	Wm. Cannan	Ceramics scholars'p fees	561	12 50
	Addie Lucas	Labor	562	7 50
	Geo. Lucas	"	563	2 50
19	Lily Weeks	"	564	5 00
20	Lizzie Keenan	"	565	5 00
	Mrs. Helen Keenan....	"	566	6 25
25	J. McLain Smith.....	Expenses as trustee.....	567	8 21
	Lily Weeks	Labor	568	5 00
30	Earl Conway	Sal., Sep., '99 (20 days)	569	13 33
	Alice Dufour	Salary, Sept., 1899.....	570	25 00
	C. F. Dowd.....	" "	571	20 00
	H. W. Kennedy.....	Emerson McMillin fellowship in astronomy.	572	30 00
	Wm. Cannan	Ceramics scholarship ...	573	20 00
	W. E. Mann.....	Em. McMillin scholarship in economics.....	574	25 00
	F. M. Hamilton.....	Salary, Sept., 1899.....	575	80 00
	W. C. Conklin.....	" "	576	40 00
	C. A. Grate.....	" "	577	30 00
	H. C. Allen.....	" "	578	115 00
29	Mrs. M. J. Kellenberger.	Serv. dept. dom. econ..	579	20 00
30	F. O. Clements.....	Salary, Sept., 1899.....	580	30 00
	J. F. Jeffrey.....	" "	581	10 00
Oct. 2	Dennis Clifford	Cleaning buildings	582	32 26
	Joe Garretson	Salary, Sept., 1899.....	583	37 50
	Lily Weeks	Labor	584	5 00
3	R. M. Rownd, P. M....	Postage	585	51 80
4	L. B. Wing.....	Ex. m't'g of b'd & com.	586	7 30
	F. C. Caldwell.....	Cash advanced as per receipt filed.....	587	232 75
5	Carl Freigan	Books	588	7 00
	Publishers' Weekly	Trade list	589	2 00
	Chas. Bryson	Repairing chairs	590	29 65
	D. Appleton & Co.....	Annual cyclopedia	591	5 00
	Amer. Jour. of Physiol.	Book	592	5 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Oct. 5	Library Bureau	Blank book	593	$8 50
	Psychological Review	Book	594	3 00
	Ira Miller	Notarial work	595	3 60
	A. H. Smythe	Let. files, paste, brushes	596	3 90
	Boston Bookbinding Co.	Binder	597	1 13
	Olive Jones	Cash advanced	598	1 25
	Burham Ant. Book Store	Books	599	5 00
	F. E. Inskeep	"	600	7 50
	S. A. Norton	"	601	55 00
	W. Morelan	Carpentry	602	1 00
	Mabel Huddleson	Work in library	603	7 00
	Boston Book Co.	Books	604	57 00
	G. E. Stechert	"	605	410 52
	Seraphim Bl'nk. Bk. Co.	Binding	606	210 65
	E. H. Bailey	Labor	607	17 10
	E. G. Bailey	"	608	9 69
	D. L. Auld	Engraving	609	95
	Columbus Brass Co.	Fixtures	610	1 75
	A. E. Adair	Masonry	611	4 50
	Columbus Sewer P. Co.	Cement	612	90
	W. T. Magruder	Cash advanced	613	37 23
	L. S. Starrett Co.	Tools	614	21 73
	Crosby St. G. & V. Co.	Gage	615	5 70
	J. S. Maclean	Book-case	616	32 50
	L. S. Wells	Book	617	5 25
	H. F. Whickham	Specimens	618	5 00
	Gold Mine Stores	Dry goods	619	5 15
	H. Osborn	Cash advanced	620	38 75
	DeLaval Separator Co.	Rope Belts	621	1 75
	Creamery Package Co.	Dairy Supplies	622	23 66
	Sells & Co.	Feed	623	37 18
	H. A. Coe	Hulling clover seed	624	15 00
	L. L. Hill	Clerical work	625	13 00
	O. V. Brumley	Labor	626	10 00
	H. J. Hammond	"	627	3 62
	H. Braun Sons & Co.	Drugs, etc	628	13 75
	Spahr & Glenn	Paper and printing	629	11 15
	Livingston Seed Co.	Seeds	630	36 05
	Franklin Toil. Sup. Co.	Laundering	631	6 35
	M. L. Seymour	Clerical work	632	3 59
	W. A. Kellerman	Cash advanced	633	15 11
	James Penn	Draying	634	2 75
	L. A. Bowman	Apparatus	635	35 00
	W. E. Case	Labor	636	38 25
	Bourne & Kn'w's Mf. Co.	Gaskets	637	1 88
	J. M. & W. Westwater	Brackets	638	3 50
	Jeffrey Mfg. Co.	Chain and wheels	639	5 00
	Capital City Mach. Wks.	Castings	640	56 49
	Columbus Gas. Co.	Gas	641	80 86
	Sipe & Sigler	Bells	642	2 52
	B. B. Wells	Carpentry	643	15 40
	Hanna Paint Mfg. Co.	Paint	644	2 65
	M. C. Hunter	Labor	645	9 75
	G. M. Berndroth	"	646	12 00
	Wm. Erdman	"	647	8 50
	Hall-Collins Hdw. Co.	Hardware	648	12 05
	W. A. Knight	Cash advanced	649	3 40
	F. E. Sanborn	"	650	2 75
	Columbus Varnish Co.	Alcohol	651	10 30
	W. H. Anderson & Co.	Books	652	22 50
	F. Charles	Draying	653	5 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Oct. 5	Cherrington P. & E. Co.	Stamp and pad	654	$2 75
	W. J. Davidson	Draying	655	50
	T. J. Dundon & Co.	Sawdust	656	3 00
	J. S. Maclean	Lumber	657	11 25
	F. J. Heer	Electrotypes	658	50
	Penna. Fuel Co.	Coal	659	4 40
	P. Hayden S. Hdw. Co.	Hardware	660	50 01
	J. G. Pulling & Co.	Pump parts	661	10 00
	Columbus Gas Co.	Coke	662	14 16
	Chicago L. S. & S. Co.	Balances, etc	663	102 10
	Samuel Butler & Co.	Soap	664	22 50
	Columbus Supply Co.	Supplies	665	201 48
	Rood Lumber Co.	Lumber	666	25 00
	Burrows Bros. Co.	Books	667	240 61
	R. W. Funk	Labor	668	28 58
	F. O. Clements	"	669	8 00
	L. A. Harsh & Co.	Mop wringer pail	670	6 00
	J. S. Schofield	Oil	671	2 50
	Moneypenny-Ham'd. Co.	Sapolio	672	9 00
	Standard Oil Co.	Oil	673	8 74
	Erner & Hopkins	Electrical apparatus	674	4 84
	G. T. Johnson	Toilet paper	675	37 50
	Bucher Eng. Co.	Etching	676	2 00
	C. W. Bryan	Cleaning vaults	677	38 00
	Samuel Smith	Sapolio	678	10 00
	R. I. Fulton	Clock	679	5 00
	Col. Pharmacal Co.	Oint jars	680	35
	J. C. Beard	Lettering	681	3 00
	Nitschke Bros	Rubber bands	682	1 88
	E. H. Moore	Guide service	683	3 12
	J. H. Burgess	"	684	37
	Annis McLaughlin	Work on class records	685	6 82
	H. R. Powell	" " "	686	4 95
	Grace Eagleson	Clerical work	687	4 95
	F. J. Pavlicek	Guide service	688	3 75
	C. C. Wilcox	"	689	3 93
	C. R. Hambleton	"	690	3 83
	F. C. Long	"	691	1 25
	C. F. Johnson	"	692	1 87
	F. C. McKinney	"	693	9 12
	M. Snow	"	694	10 00
	Miller Furniture Co.	Furniture	695	62 95
	Schoedinger, F'rn & Co.	Hardware	696	13 92
	Hasbrook, Barger Co.	Dishes	697	5 90
	F. E. Flescher	Labor	698	6 75
	Eaton Machine Works.	Locker parts and drills	699	7 82
	McClelland & Co.	Office supplies	700	19 20
	Bausch & Lomb Opt. Co.	Optical instruments and supplies	701	466 15
	Krauss, Butler & B. Co.	Shades	702	30 00
	Col. Transfer Co.	Use of wagon	703	9 00
	Webb Sta. & Ptg. Co.	Blank books	704	22 50
	U. B. Publishing House.	Advertising	705	15 10
	Ohio State Journal Co.	"	706	6 00
	Champlin Printing Co.	Printing	707	255 55
	Murray City Coal Co.	Coal	708	142 99
	H. W. Johns Mfg. Co.	Paints	709	6 88
	Charles Vogel	Labor	710	6 25
	Vogelgesang Furn. Co.	Repairs	711	63 20
	L. Fink	Papering	712	23 00
	W. R. Beattie	Labor	713	8 10

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Oct. 5	J. C. Perry	Labor	714	$10 95
	Kelton & Converse	Lumber	715	269 06
	Central Ohio Paper Co.	Paper	716	114 40
	P. A. Fenstermaker	Painting, etc	717	47 86
	J. W. Cawthorn	Carpentry	718	42 75
	F. Fleischer	Labor	719	8 70
	Col. Paint Mfg. Co.	Paint	720	28 66
	Col. Supply Co	Hardware	721	247 51
	Col. Wire and Iron Wks.	Wire guards	722	29 40
	Masury, Young & Co.	Oil	723	30 00
	B. D. Potts	Hardware	724	86 50
	Palmer & Beck	Roofing	725	105 11
	Tallmadge Hardw. Co.	Hardware	726	79 21
	E. Doddington & Co.	Lumber	727	280 94
	M. P. Street	Masonry	728	6 75
	J. J. Gheen	Plastering	729	84 15
	E. F. Moore	Labor	730	2 02
	Rilen Masters	Man and team	731	2 40
	A. F. Wilcox	Labor	732	14 25
	W. Morelan	Carpentry	733	9 00
	J. C. Howard	Painting	734	2 55
	J. H. Randall	Carpentry	735	26 75
	J. H. Schaeffer	"	736	39 00
	L. Schaeffer	"	737	17 50
	C. Shaffer	"	738	31 00
	Sheppard & Co.	Printing	739	2 00
	C. N. Mooney	Labor	740	10 50
	W. E. Mann	Labor	741	11 55
	P. F. Yoerger	Painting	742	2 00
	Curts & Jennings	Advertising	743	15 12
	Ruggles-Gale Co	Mounting maps, etc.	744	4 70
	Col. P. & W. Glass Co.	Glass	745	3 75
	C. B. Morrey	Platinum crucible	746	12 00
	Tracy-Wells & Co.	Tags	747	11 20
	Hann & Adair	Printing	748	53 14
	Blackwood, Green & Co.	Hardware	749	31 28
	Kimball & Matthews	Photo supplies	750	162 46
	Mallinckrodt Chem. Wks.	Acids	751	124 31
	W. H. Mullins	Castings	752	9 00
	Green, Joyce & Co.	Towels	753	63 00
	H. Troemner	Repairing balances	754	52 75
	Kauffman, Lattimer Co.	Chemical apparatus	755	686 79
	Col. Mill & M. S. Co.	Hardware	756	25 88
	Engelke & Bigelow	Freight and draying	757	49 10
	J. W. Groves	Salary, Sept., 1899	758	50 00
9	L. Weeks	Work in gymnasium	759	5 00
15	C. E. Barnett	Oct. salary, ½ month	760	32 50
12	Sherwood Mfg. Co.	Cleaners and cutters	761	37 24
14	Ohio National Bank	Foreign bill exchange	762	11 35
	Ohio National Bank	" "	763	21 85
	Ohio National Bank	" "	764	59 90
16	L. Weeks	Services as maid	765	5 00
28	W. O. Thompson	Salary, Oct., 1899	766	416 67
	Alexis Cope	" "	767	187 50
	C. E. Steeb	" "	768	37 50
	J. Blackford	" "	769	54 17
	E. D. Cockins	" "	770	58 33
	T. F. Hunt	" "	771	250 00
	G. W. Knight	" "	772	250 00
	W. F. Hunter	" "	773	250 00
	A. M. Bleile	" "	774	225 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Oct. 28	C. N. Brown	Salary, Oct., 1899	775	$225 00
	A. C. Barrows	" "	776	225 00
	R. D. Bohannon	" "	777	225 00
	B. L. Bowen	" "	778	225 00
	S. C. Derby	" "	779	225 00
	J. V. Denney	" "	780	225 00
	E. A. Eggers	" "	781	225 00
	J. P. Gordy	" "	782	225 00
	W. A. Kellerman	" "	783	225 00
	W. R. Lazenby	" "	784	225 00
	Wm. McPherson	" "	785	225 00
	W. T. Magruder	" "	786	225 00
	H. Osborn	" "	787	225 00
	J. R. Smith	" "	788	225 00
	W. H. Scott	" "	789	225 00
	B. F. Thomas	" "	790	225 00
	H. A. Weber	" "	791	225 00
	N. W. Lord	" "	792	200 00
	F. A. Ray	" "	793	200 00
	G. B. Kauffman	" "	794	200 00
	Ed. Orton, Jr	" "	795	180 00
	J. N. Bradford	" "	796	180 00
	F. E. Sanborn	" "	797	180 00
	H. C. Lord	" "	798	160 00
	F. C. Clark	" "	799	160 00
	G. W. McCoard	" "	800	160 00
	C. P. Linhart	" "	801	160 00
	D. S. White	" "	802	160 00
	F. C. Caldwell	" "	803	160 00
	Ed. Orton	" "	804	150 00
	E. A. Hitchcock	" "	805	150 00
	C. S. Prosser	" "	806	150 00
	W. D. Gibbs	" "	807	160 00
	P. G. Bowen	" "	808	140 00
	W. H. Page	" "	809	140 00
	W. H. Siebert	" "	810	135 00
	O. B. Jones	" "	811	135 00
	S. A. Norton	" "	812	120 00
	E. B. Kinkead	" "	813	120 00
	J. E. Boyd	" "	814	120 00
	H. C. Allen	" "	815	115 00
	C. E. Sherman	" "	816	110 00
	T. E. French	" "	817	110 00
	J. R. Taylor	" "	818	110 00
	C. W. Mesloh	" "	819	110 00
	A. W. Hodgman	" "	820	110 00
	J. H. Schaffner	" "	821	100 00
	W. E. Henderson	" "	822	100 00
	J. A. Bownocker	" "	823	100 00
	W. A. Knight	" "	824	100 00
	C. L. Arnold	" "	825	100 00
	K. D. Swartzel	" "	826	100 00
	C. B. Morrey	" "	827	100 00
	W. L. Graves	" "	828	100 00
	C. A. Bruce	" "	829	100 00
	F. M. Hamilton	" "	830	80 00
	Geo. H. McKnight	" "	831	90 00
	Wm. Renck	" "	832	85 00
	J. S. Hine	" "	833	85 00
	F. L. Landacre	" "	834	85 00
	C. P. Crowe	" "	835	80 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899.				
Oct. 28	A. E. Vinson	Salary, Oct., 1899	836	$80 00
	Col. Water Works	Water rents	837	422 66
	F. E. Kester	Salary, Oct., 1899	838	80 00
	Mrs. James Canfield	" "	839	75 00
	E. O. Randall	" "	840	70 00
	D. F. Pugh	" "	841	70 00
	W. A. Landacre	" "	842	70 00
	W. F. Lavery	" "	843	70 00
	C. B. Frederick	" "	844	70 00
	John B. Sanborn	" "	845	70 00
	E. E. Somermeier	" "	846	70 00
	T. K. Lewis	" "	847	60 00
	F. A. Fish	" "	848	60 00
	C. B. Guittard	" "	849	55 00
	H. N. Townshend	" "	850	55 00
	G. S. Kellicott	" "	851	55 00
	Maude D. Jeffrey	" "	852	55 00
	Lucy Allen	" "	853	55 00
	O. V. Brumley	" "	854	50 00
	S. W. Martin	" "	855	50 00
	D. C. Huddleson	" "	856	50 00
	A. V. Bleininger	" "	857	40 00
	J. B. Parker	" "	858	30 00
	M. Dresbach	" "	859	30 00
	F. O. Clements	" "	860	45 00
	H. C. Gore	" "	861	30 00
	J. H. Vosskuehler	" "	862	30 00
	A. H. McIntire	" "	863	30 00
	E. L. Ball	" "	864	30 00
	J. W. Young	" "	865	30 00
	C. A. Grate	" "	866	30 00
	F. J. Hale	" "	867	30 00
	S. W. Collett	" "	868	25 00
	H. W. Brown	" "	869	25 00
	J. H. Collins	" "	870	20 00
	J. A. Shauck	" "	871	17 50
	E. H. Bailey	" "	872	15 00
	R. E. McIntosh	" "	873	12 50
	W. C. McCracken	" "	874	150 00
	E. E. Harrold	" "	875	90 00
	J. P. Covan	" "	876	70 00
	G. R. Rose	" "	877	65 00
	F. Ruhlen	" "	878	60 00
	A. F. Hall	" "	879	60 00
	C. M. Low	" "	880	54 17
	F. K. Luke	" "	881	50 00
	H. C. Price	" "	882	50 00
	W. Standley	" "	883	50 00
	B. LeBay	" "	884	50 00
	T. Boude	" "	885	45 00
	M. Peck	" "	886	40 00
	A. Chantler	" "	887	45 00
	G. A. Goodspeed	" "	888	40 00
	J. H. Brown	" "	889	40 00
	D. D. Geren	" "	890	40 00
	W. W. Whitestine	" "	891	40 00
	H. Chantler	" "	892	40 00
	G. C. Denny	" "	893	40 00
	M. N. Cook	" "	894	40 00
	W. C. Conklin	" "	895	40 00
	T. E. Osborn	" "	896	40 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Oct. 28	W. Townsel	Salary, Oct., 1899	897	$25 00
	J. C. Perry	" "	898	12 50
	J. Garrettson	" "	899	37 50
	B. Irwin	" "	900	45 00
	James Kelly	" "	901	25 00
	Mrs. E. R. Hubler	" "	902	33 33
	W. C. Weir	" "	903	20 00
	A. G. McCall	" "	904	20 00
	W. E. Mann	" "	905	25 00
	H. W. Kennedy	" "	906	30 00
	Wm. Cannan	" "	907	20 00
	W. C. Mills	" "	908	35 00
	Alice Dufour	" "	909	25 00
	Grace Pitts	" "	910	30 00
	C. L. Dowd	" "	911	20 00
	Earl Conway	" "	912	20 00
	N. P. Oglesby	" "	913	40 00
	D. A. Kohr	" "	914	60 00
	J. A. Jeffrey	" "	915	10 00
	J. W. Groves	" "	916	50 00
23	Flint & Wall'g Mfg. Co.	Pipe	917	60 43
	Lily Weeks	Gym. service	918	5 00
24	Mrs. M. J. Kellenberger	5 weeks' service dept. domestic economy	919	25 00
26	Chas. H. Woodruff	Salary, Oct., 1899	920	65 00
Nov. 1	Lily Weeks	Labor	921	5 00
4	R. M. Rownd, P. M.	Postage stamps	922	17 00
5	Lily Weeks	Serv. as jan. gymnasium	923	5 00
10	W. C. Heller & Co.	Steel boxes	924	7 70
	Gregory Electric Co.	Lamps and switches	925	13 90
	Sipe & Sigler	Cells	926	2 77
	Kinkade & Liggett	Wire screens	927	9 40
	Western Electric Co.	Shade and globes	928	2 08
	The Circleville Ice Co.	Ice and refrigeration	929	25 00
	The Ashcroft Mfg. Co.	Guage repairs	930	24 25
	Blackwood, Green & Co.	Tin, tanks, etc	931	30 60
	The P. Hayden Saddlery and Hdw. Co.	Tin and copper	932	53 84
	The G. B. Schulte S. Co.	Steel and shafting	933	19 75
	Wm. Erdman	Student labor	934	17 00
	O. I. Dick	"	935	4 88
	G. M. Berndroth	"	936	32 60
	Hall-Collins Hdw. Co.	Brads, screws, etc	937	11 44
	M. C. Hunter	Student labor	938	10 80
	Col. Forge & Iron Co.	Anvil	939	6 88
	Brown & Sharpe Mf. Co.	Rule, device and hob	940	19 34
	Cleve'd Twist Drill Co.	Drills	941	7 32
	Burr's Damascus T. Co.	Tools	942	19 62
	The Hasbr'k-Bargar Co.	Dishes and supplies	943	2 78
	The Alphea Dairy Co.	Milk and butter	944	2 85
	Logan McCormick	Frames	945	11 90
	J. A. Wallace	Lecture	946	5 00
	Palmer & Beck	Flowerpots	947	20 00
	Glucose Sugar Ref. Co.	Gluten meal	948	42 40
	Champlin Printing Co.	Printing postals	949	5 15
	Sells & Co	Feed	950	24 53
	Woodard Photo Co.	Slides	951	7 00
	Deering Harvester Co.	Repairs, oil, etc	952	129 37
	Laura L. Hill	Clerical work	953	13 00
	Warren-Southw'k C. Co.	Dairy wagon	954	200 00
	W. H. Hoskins	Advertising	955	17 50

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 10	R. L. McClelland	Labor	956	$1 25
	D. S. White	Sundries	957	4 75
	A. N. Irwin	Work and supplies	958	28 89
	The Breeders' Gazette	Advertising	959	22 00
	David C. Beggs Co.	Shades	960	5 50
	F. A. Ward	Mounting tiger	961	75 00
	Champlin Printing Co.	Printing	962	9 50
	E. C. Livenspire	Hooks, rings, etc.	963	2 30
	The Griswold, Sohl Co.	Iron and cutting	964	81
	John Bower	Masonry	965	18 00
	Neely & Converse	Work on coal bin	966	29 85
	Kinkade & Liggett	Work on roof	967	6 40
	Louis Lind	Sewer pipe	968	38 35
	M. P. Streett	Brick and labor	969	224 36
	Fitzpatrick & Hoepfner	Plumbing	970	38 46
	J. S. Maclean	Material	971	13 00
	P. Hayden Sad.-H. Co.	Castings, stock, etc.	972	60 67
	Eimer & Amend	Pumps	973	4 61
	F. O. Schoedinger	Roof	974	46 00
	Borger Bros. & Co.	Work on stock	975	24 49
	H. H. Walling	Painting	976	15 50
	J. S. Maclean	Sawdust	977	3 00
	Edgar B. Fox	Superintending building	978	25 00
	Robert Lawson	Door sills	979	3 20
	Arthur Watt	Labor	980	26 66
	Borden & Selleck Co.	Milk scales	981	7 00
	Burrows Bros. Co.	Zeller Aristotle	982	4 68
	Schilling Foundry Co.	Castings	983	44
	Nitschke Bros	Envelopes	984	1 40
	John Lawrence	Generator	985	6 50
	Ziegler Elec. Co.	Balances	986	5 10
	Andrew Spittal	Work in physics dept.	987	69 16
	Lawrence Press Co.	Checks, blanks, etc.	988	1 75
	A. E. Foote	Pyrolusite	989	3 38
	Baker & Co.	Platinum ware	990	149 89
	Hann & Adair	Printing	991	4 55
	The Seraphim B. B. Co.	Books	992	57 00
	Chicago Bl. Pr. Pap. Co.	B. P. paper	993	2 40
	Kimball & Matthews	Photo material	994	8 76
	Kauffman, Lattimer Co.	Drugs and sundries	995	475 00
	Amer. Aristotype Co.	Plates	996	9 75
	Baker & Adamson C. Co.	Chemicals	997	19 85
	Mallinckrodt Chm. Wks.	"	998	209 77
	John Carbutt	Plates	999	35 74
	Chicago L. Sup. & S. Co.	Sundries	1000	54 77
	G. F. Balck Mfg. Co.	Pumps	1001	1,030 00
	H. A. Getz	Floral wreath	1002	20 00
	B. D. Potts	Flange	1003	81
	Col. M. & Mine Sup. Co.	Supplies	1004	268 06
	J. M. & W. Westwater	"	1005	20 00
	R. F. Morse	Guage preserver	1006	3 25
	Elec. Appliance Co.	Supplies	1007	101 00
	Man. Gen. Con. Co.	Bulb and globe	1008	1 25
	Bugbee & Laycock	Crank pin braces	1009	4 40
	Westing El. Mfg. Co.	Switch	1010	15 75
	C. L. Traver	Books and express	1011	2 12
	Journal of C. & C. Bull.	1 copy year book	1012	1 25
	Chas Scribner's Sons	Books	1013	1 73
	W. L. Redrow	Student help	1014	15 15
	L. B. Wing	Trustee expenses	1015	8 00
	U. S. Mort. & Tr. Co.	Bonds due Dec. 1st	1016	25,000 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 10	U. S. Mort. & Tr. Co..	Interest due Dec. 1st....	1017	$2,812 50
	Clinton National Bank..	" "	1018	1,800 00
	Clinton National Bank..	" "	1019	3,825 00
	Z. L. White.....	Shade	1020	1 10
	Green, Joyce & Co.....	Crash	1021	4 20
	A. M. Bleile.....	Supplies	1022	6 46
	M. C. Lilley & Co.....	Bugles and cord.....	1023	12 00
	Miller Furniture Co....	Chairs tables and tips..	1024	15 39
	Tallmadge Hard. Co....	Glass	1025	7 20
	James Penn	Oats	1026	4 71
	A. C. Barrows.....	Stamp and pad.....	1027	50
	F. C. Clark.....	Envelopes and cards....	1028	1 84
	Library Bureau	Label holders & supports	1029	7 50
	Univ. of Chicago Press.	Pol. Econ. Journal.....	1030	14 04
	Spahr & Glenn.....	Reading statements	1031	1 75
	D. Appleton & Co.....	Spencers Socialogy.....	1032	32 50
	Burrows Bros. & Co....	Standard Dictionary ...	1033	17 00
	Col. Supply Co.....	Pipe and fittings.....	1034	18 23
	C. K. Leith.....	Collections of rocks....	1035	40 00
	Jas. Penn	Hauling	1036	50
	A. E. Day.....	Work	1037	50
	J. J. Gheen.....	Plastering	1038	33 60
	Hanna Paint Mfg. Co..	Filler and oil.....	1039	3 00
	S. S. Rickley, Treas....	Labor of A. B. Coover..	1040	5 87
	W. C. Mills.....	Supplies	1041	5 04
	B. F. McCarty & Co....	Frogs	1042	6 00
	Orvis & Marshall.....	Spacer and paper.....	1043	3 00
	J. S. Hine.....	Department supplies ...	1044	9 95
	G. V. Bailey.....	Mounting skeleton	1045	14 00
	F. J. Tyler.....	Lab. work	1046	2 25
	Payne-McD. Hdw. Co..	Supplies	1047	18 07
	H. H. & C. S. Brinkey..	Department supplies ...	1048	5 08
	A. W. Livingston's Sons	Pots	1049	17 10
	O. E. Jennings.....	Labor	1050	4 50
	Kimball & Matthews....	Repairs, etc.....	1051	2 20
	N. M. Glatfelter.....	Herbarium specimens ..	1052	5 50
	C. O. Paper Co.....	Paper	1053	4 66
	Edna Armstrong.....	Work on herbarium....	1054	1 50
	Hann & Adair.....	Envelopes and papers..	1055	8 50
	Payne-McD. Hdw. Co.	Bot. dept. supplies.....	1056	11 22
	J. Wanamaker	Books	1057	24 10
	W. H. Mears.....	Labor	1058	2 34
	F. W. Arnold.....	"	1059	2 50
	H. Mesloh	"	1060	2 28
	O. D. Clark.....	"	1061	3 91
	C. L. Wottring.....	"	1062	6 65
	Ira McKinley	"	1063	5 43
	A. F. Wilcox.....	"	1064	44 00
	F. W. Nelson.....	"	1065	2 59
	Krauss, Butler & B. Co.	Linoleum	1066	30 00
	M. Rice	Work	1067	4 00
	M. Huddleson.....	"	1068	10 00
	Mason Snow	"	1069	12 32
	Robt. Clarke Co.....	Book	1070	2 60
	Burrows Bros. Co.....	Books library	1071	136 21
	G. E. Stechert.....	"	1072	135 48
	J. W. Shaw.....	Labor	1073	11 46
	Library Bureau	Cards, boxes, etc.....	1074	33 43
	Boston Book Co.....	Books	1075	100 00
	S. A. Norton.....	Chemical works	1076	22 00
	S. N. Young.....	Work in law library....	1077	9 20

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 10	Seraphim Blank. B. Co.	Binding	1078	$22 30
	Spahr & Glenn	Printing	1079	9 25
	The H. Cole Co	Thumb tacks	1080	1 10
	A. H. Smythe	Files	1081	2 50
	R. L. Babb	Year book	1082	5 00
	Orvis & Marshall	Ribbon paper	1083	2 75
	Miller's Fair	Hooks	1084	75
	Col. Mdse. Co	Erasers	1085	9 00
	Jas. Penn	Hauling	1086	5 30
	T. J. O'Neil	Rent of canvas	1087	4 50
	C. F. Slyh, Supt	Vault cleaning	1088	10 60
	Spahr & Glenn	Envelopes	1089	2 25
	Geo. Roth	Guide	1090	2 00
	F. C. Long	"	1091	3 00
	W. U. Telegraph Co	Telegrams	1092	5 65
	W. G. Wallace	Guide	1093	3 25
	Tracy Wells Co	Sundries	1094	28 00
	Mrs. F. D. Myers	Washing towels	1095	4 75
	Amer. Dist. Tel. Co	Night watch boxes	1096	27 00
	Green, Joyce & Co	Ribbon	1097	4 68
	Standard Oil Co	Oils	1098	34 42
	Nitschke Bros	Printing	1099	35 67
	C. U. Telephone Co	Service	1100	69 68
	Nitschke Bros	Wrapping paper	1101	28 00
	Z. L. White & Co	Ribbon	1102	4 80
	Chas. Lowe	Night watch	1103	1 50
	M. C. Lilley & Co	Repairs flag	1104	1 25
	E. L. Orndorff	Guide	1105	4 25
	F. C. McKinney	"	1106	5 75
	C. H. Woodruff	Labor	1107	6 50
	C. M. & W. Westwater	Globes	1108	50
	Agric. Students P. Co	Advertising	1109	80 00
	Shaw Walker Co	Desk boxes	1110	4 30
	Cent. O. Paper Co	Brands, etc	1111	3 61
	E. G. Soltman	Drawing tables	1112	22 50
	Schilling Foundry Co	C. iron	1113	1 80
	Franklin Toilet Sup. Co.	Towels, etc	1114	2 50
	The Bristol Co	Charts	1115	1 17
	Crosby St. G. & V. Co.	Repairs	1116	1 00
	Hohmann, M. Mfg. Co.	Flue, etc	1117	26 25
	Cols. Machine Co	Chemicals	1118	3 15
	S. W. Smith	Office chair	1119	3 75
	E. G. Bailey	Labor	1120	14 38
	F. J. Hale	Lab. work	1121	2 40
	W. T. Magruder	Telegram	1122	50
	Nitschke Bros	Ink	1123	50
	McClellan & Co	Stencil	1124	1 05
	Col. Supply Co	Packing	1125	7 50
	C. U. Telephone Co	Telephone service	1126	90
	M. L. Seymour	Clerical work	1127	6 00
	Domestic Laundry	Laundering	1128	30 00
	J. C. Porterfield	Basket balls	1129	12 50
	A. G. Spaulding & Bros.	Lunger	1130	2 10
	Cols. Wire & Iron Wks.	Guards and rods	1131	6 50
	Wm. Taylor M. & G. Co.	Lumber, etc	1132	521 97
	Keasbey & Mattison	Magnabestos covering	1133	40 00
	Flint & Walling Mf. Co.	Pipe	1134	24 46
	M. P. Streett	Masonry	1135	12 50
	Col. Sewer Pipe Co	Pipe	1136	11 55
	James LeRoy	Labor	1137	13 65
	The Fish Stone Co	Stone	1138	9 18

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 10	Fred Fleischer	Stone	1139	$13 65
	Eaton Machine Works	Cable, etc	1140	31 88
	Harry Kinnear	Wiring	1141	3 60
	Krauss, Butler & B. Co.	Shades	1142	19 90
	Tallmadge Hardware Co.	Supplies	1143	33 38
	Charles W. Herb	Letter files	1144	15 50
	Engelke & Bigelow	Drayage and freight	1145	79 61
	C. E. Stechert	Books	1146	3 40
	Luth. Book Concern	Binding	1147	2 25
	Osborn, Wil'ms & Horn	Coal	1148	23 42
	Col. M. & Mine Sup. Co.	Supplies	1149	15 56
	Murray City Coal Co.	Coal	1150	683 12
	H. Braun Sons & Co.	Sundries	1151	10 38
	J. H. Randall	Carpenter work	1152	27 00
	Columbus Brass Co.	Goose-necks, etc.	1153	6 27
	J. C. Howard	Painting	1154	90 75
	Columbus Supply Co.	Supplies	1155	51 23
	Champlin Printing Co.	Printing	1156	124 25
	Erner & Hopkins	Supplies	1157	17 78
	Vogelgesang Furn. Co.	Register and chim top	1158	59 00
	Cap. City Mach. Wks.	Supplies	1159	8 93
	E. Doddington & Co.	Lumber	1160	80 13
	Hann & Adair	Sundries	1161	22 62
	Schoedinger, F'rn & Co.	"	1162	14 29
	Kelton & Converse	Lumber	1163	198 76
	J. S. Abbott & Co.	Hardware	1164	39 59
	Blackwood, Green & Co.	"	1165	18 37
	Wm. Burdell, Jr.	Hames, etc.	1166	45 50
	Bausch & Lomb Opt. Co.	Microscopes, etc.	1167	167 93
	J. W. Cawthon	Carpentry	1168	20 25
	A. F. Wilcox	"	1169	12 50
	Wilbert Morelan	"	1170	13 25
	Louis Schaffer	"	1171	19 50
	Clinton Schaffer	"	1172	21 25
	M. D. Geary	"	1173	12 50
	W. H. Waters	Labor	1174	36 00
	Columbus Gas Co.	Gas	1175	130 12
13	John T Mack	Expense	1176	31 30
	Lily Weeks	Gym. work	1177	5 00
16	C. H. E. Moore	Reading math. papers	1178	5 00
	Mrs. Anna D. Orton	Salary Dr. Orton, Nov–Dec., 1899	1179	300 00
	E. O. Fippin	Military services	1180	50 00
17	D. M. Massie	Expenses as trustee	1181	40 22
	Ohio National Bank	Bill Exc. order I. Hayez	1182	5 00
18	Ohio National Bank	Same to ord .L. Stender	1183	20 10
20	Bannon & Bannon	Printing brief, O. S. U. vs. Cuppett & Webb	1184	25 90
25	W. O. Thompson	Salary, Nov., 1899	1185	416 67
22	Alex. Cope	" "	1186	187 50
21	Carl E. Steeb	" "	1187	50 00
25	Katherine Duncan	" "	1188	50 00
	Edith D. Cockins	" "	1189	58 33
	T. F. Hunt	" "	1190	250 00
	Geo. W. Knight	" "	1191	250 00
	W. F. Hunter	" "	1192	250 00
	A. M. Bleile	" "	1193	225 00
	C. N. Brown	" "	1194	225 00
	A. C. Barrows	" "	1195	225 00
	R. D. Bohannon	" "	1196	225 00
	B. L. Bowen	" "	1197	225 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
v. 25	S. C. Derby	Salary, Nov., 1899	1198	$225 00
	J. V. Denney	" "	1199	225 00
	E. A. Eggers	" "	1200	225 00
	J. P. Gordy	" "	1201	225 00
	W. A. Kellerman	" "	1202	225 00
	W. R. Lazenby	" "	1203	225 00
	Wm. McPherson	" "	1204	225 00
	W. T. Magruder	" "	1205	225 00
	H. Osborn	" "	1206	225 00
	J. R. Smith	" "	1207	225 00
	W. H. Scott	" "	1208	225 00
	B. F. Thomas	" "	1209	225 00
	H. A. Weber	" "	1210	225 00
	N. W. Lord	" "	1211	200 00
	Frank A. Ray	" "	1212	200 00
	G. B. Kauffman	" "	1213	200 00
	Edward Orton, Jr.	" "	1214	180 00
	J. N. Bradford	" "	1215	180 00
	F. E. Sanborn	" "	1216	200 00
	H. C. Lord	" "	1217	160 00
	F. C. Clark	" "	1218	160 00
	G. W. McCoard	" "	1219	160 00
	C. P. Linhart	" "	1220	160 00
	D. S. White	" "	1221	160 00
	F. C. Caldwell	" "	1222	160 00
	E. A. Hitchcock	" "	1223	150 00
	C. S. Prosser	" "	1224	150 00
	W. D. Gibbs	" "	1225	160 00
	P. G. Bowman	" "	1226	140 00
	W. H. Page	" "	1227	140 00
	W. H. Siebert	" "	1228	135 00
	O. B. Jones	" "	1229	135 00
	S. A. Norton	" "	1230	120 00
	E. B. Kinkead	" "	1231	120 00
	James E. Boyd	" "	1232	120 00
	H. C. Allen	" "	1233	115 00
	C. E. Sherman	" "	1234	110 00
	J. R. Taylor	" "	1235	110 00
	T. E. French	" "	1236	110 00
	C. W. Mesloh	" "	1237	110 00
	A. W. Hodgman	" "	1238	110 00
	J. H. Schaffner	" "	1239	100 00
	W. E. Henderson	" "	1240	100 00
	J. A. Bownocker	" "	1241	100 00
	W. A. Knight	" "	1242	100 00
	C. L. Arnold	" "	1243	100 00
	K. D. Swartzel	" "	1244	100 00
	C. B. Morrey	" "	1245	100 00
	W. L. Graves	" "	1246	100 00
	C. A. Bruce	" "	1247	100 00
	F. M. Hamilton	" "	1248	80 00
	G. H. McKnight	" "	1249	90 00
	Wm. Renck	" "	1250	85 00
	J. S. Hine	" "	1251	85 00
	F. L. Landacre	" "	1252	85 00
	C. P. Crowe	" "	1253	80 00
	A. E. Vinson	" "	1254	80 00
	F. E. Kester	" "	1255	80 00
	S. E. Canfield	" "	1256	75 00
	E. O. Randall	" "	1257	70 00
	D. F. Pugh	" "	1258	95 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 25	W. A. Landacre	Salary, Nov., 1899	1259	$70 00
	W. F. Lavery	" "	1260	70 00
	C. B. Frederick	" "	1261	70 00
	J. B. Sanborn	" "	1262	70 00
	E. E. Somermeier	" "	1263	70 00
	T. K. Lewis	" "	1264	60 00
	F. A. Fish	" "	1265	60 00
	C. B. Guittard	" "	1266	55 00
	H. N. Townshend	" "	1267	55 00
	G. Kellicott	" "	1268	55 00
	Maude Jeffrey	" "	1269	55 00
	Lucy Allen	" "	1270	55 00
	O. V. Brumley	" "	1271	50 00
	S. W. Martin	" "	1272	50 00
	D. C. Huddleson	" "	1273	50 00
	A. V. Bleininger	" "	1274	40 00
	J. B. Parker	" "	1275	30 00
	M. Dresbach	" "	1276	30 00
	F. O. Clements	" "	1277	45 00
	H. C. Gore	" "	1278	30 00
	J. H. Vosskuehler	" "	1279	30 00
	A. H. McIntire	" "	1280	30 00
	E. L. Ball	" "	1281	30 00
	Lily Weeks	Gym. services	1282	5 00
	J. W. Young	Salary, Nov., 1899	1283	30 00
	C. A. Grate	" "	1284	30 00
	F. J. Hale	" "	1285	30 00
	S. W. Collett	" "	1286	25 00
	H. W. Brown	" "	1287	25 00
	J. H. Collins	" "	1288	20 00
	J. A. Shauck	" "	1289	17 50
	E. H. Bailey	" "	1290	15 00
	R. E. McIntosh	" "	1291	12 50
	W. C. McCracken	" "	1292	150 00
	E. E. Harrold	" "	1293	90 00
	J. P. Covan	" "	1294	70 00
	G. R. Rose	" "	1295	65 00
	F. Ruhlen	" "	1296	60 00
	A. F. Hall	" "	1297	60 00
	C. M. Low	" "	1298	54 17
	F. K. Luke	" "	1299	50 00
	H. C. Price	" "	1300	50 00
	W. Standley	" "	1301	50 00
	B. LeBay	" "	1302	50 00
	T. Boude	" "	1303	45 00
	W. H. Case	" "	1304	45 00
	M. Peck	" "	1305	40 00
	A. Chantler	" "	1306	45 00
	G. A. Goodspeed	" "	1307	40 00
	J. H. Brown	" "	1308	40 00
	D. D. Geren	" "	1309	40 00
	W. Whitestine	" "	1310	40 00
	H. Chantler	" "	1311	40 00
	G. C. Denney	" "	1312	40 00
	M. N. Cook	" "	1313	40 00
	W. C. Conklin	" "	1314	40 00
	T. E. Osburn	" "	1315	40 00
	W. Townsel	" "	1316	25 00
	J. C. Perry	" "	1317	12 50
	Joe. Garretson	" "	1318	37 50
	B. I. Irwin	" "	1319	45 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Nov. 25	James Kelly	Salary, Nov., 1899	1320	$25 00
	E. R. Hubler	" "	1321	33 33
	W. C. Weir	" "	1322	20 00
	A. G. McCall	" "	1323	20 00
	H. W. Kennedy	" "	1324	30 00
	W. E. Mann	" "	1325	25 00
	W. Cannan	" "	1326	20 00
	W. C. Mills	" "	1327	35 00
	Alice Dufour	" "	1328	25 00
	G. L. Pitts	" "	1329	30 00
	C. F. Dowd	" "	1330	20 00
	E. Conway	" "	1331	20 00
	E. H. Moore	" "	1332	60 00
	N. P. Oglesby	" "	1333	40 00
	D. A. Kohr	" "	1334	60 00
	J. F. Jeffrey	" "	1335	10 00
	J. W. Groves	" "	1336	50 00
	C. L. E. Moore	" "	1337	10 00
	G. V. Bailey	Work	1338	32 00
Dec. 1	Mrs. M. P. Kellenberger	Serv. dom. econ	1339	20 00
Nov. 27	T. C. Mendenhall	Exp. Orton Mem. Serv.	1340	51 50
	G. K. Gilbert	" " "	1341	34 50
	C. H. Woodruff	Carpentry	1342	65 00
	T. J. Godfrey	Expenses as trustee	1343	35 25
	Lily Weeks	Gym. services	1344	5 00
28	Kate Shanahan	Laundry	1345	25 00
	R. M. Rownd, P. M.	Postage stamps	1346	18 00
Dec. 1	Clinton Nat. Bank	Paymt. certfs. indebt.	1347	30,000 00
	D. F. Pugh	Adv. in Oct., salary	1348	20 00
2	Ohio Nat. Bank	Bill of exchange	1349	564 04
1	J. McLain Smith	Expenses as trustee	1350	7 35
5	Col. Gas Co.	Gas	1351	139 80
	Lily Weeks	Gym. services	1352	3 00
6	R. M. Rownd, P. M.	Stamps	1353	10 00
	G. Bruder	Band instruction	1354	26 00
	W. F. Hunter	Stamps	1355	3 50
9	F. C. Clark	Office supples	1356	1 95
	H. Powell	Clerical work	1357	10 00
	Mason Snow	Work in library	1358	8 60
	J. W. Shaw	" "	1359	8 95
	S. N. Young	" "	1360	9 05
	Mabel Rice	" "	1361	2 75
	Mabel Huddleson	" "	1362	10 50
	F. Fleischer	Wheeling coal	1363	40 50
	H. Kinnear	Wiring	1364	10 80
	A. M. Irwin	Campus work	1365	1 21
	N. A. Burgess	"	1366	2 87
	F. W. Nelson	"	1367	1 68
	Ira McKinley	"	1368	1 12
	N. L. Seymour	Clerical work	1369	6 37
	F. J. Hale	Lab. work	1370	3 10
	G. G. Leinbaugh	Work	1371	1 35
	E. G. Bailey	Pipe fitting, etc	1372	14 00
	E. H. Bailey	"	1373	4 05
	W. F. Magruder	Tel. work	1374	1 45
	W. L. Redrow	Student work	1375	3 30
	R. W. Funk	Labor in store room	1376	27 15
	J. H. Nold	Work	1377	1 50
	K. H. Duncan	St. car t'ck'ts for guides	1378	5 00
	W. R. Lazenby	R. R. ticket to London	1379	6 00
	W. G. Wallace	Guide	1380	4 75

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Dec. 9	R. Thompson	Guide	1381	$4 38
	E. L. Orndorff	"	1382	4 13
	F. C. McKinney	"	1383	3 38
	F. C. Long	"	1384	3 50
	W. D. Gibbs	Advertising	1385	6 00
	R. E. McIntosh	Labor	1386	9 70
	G. G. Linebaugh	"	1387	6 83
	F. J. Tyler	"	1388	2 25
	G. V. Bailey	"	1389	12 00
	A. S. Watts	"	1390	29 25
	Andrew Spittal	Labor in physics dept.	1391	51 81
	H. J. Hammond	" " "	1392	7 26
	Laura L. Hill	Clerical work	1393	13 00
	Wm. Erdman	Student labor	1394	6 00
	M. C. Hunter	"	1395	11 70
	G. M. Berndroth	"	1396	24 00
	M. L. Seymour	Clerical work botany	1397	14 23
	B. LeBay	Work	1398	34 50
	W. Watters	Labor in trench	1399	34 50
	S. E. Canfield	Supplies	1400	3 00
	M. D. Geary	Carpenter work	1401	20 75
	W. Morelan	"	1402	12 75
	J. W. Cawthon	"	1403	19 75
	A. F. Wilcox	"	1404	24 75
	J. H. Randall	"	1405	32 75
	Col. Brass Co	Supplies	1406	9 15
	W. Burdell	Repair medicine balls	1407	3 00
	Col. Mill & Mine S. Co.	Pipe and supplies	1408	47 32
	Baker & Adamson C. Co.	Supplies	1409	33 47
	Kimball & Matthews	"	1410	5 59
	Chgo. Blue P. Paper Co.	Blue print paper	1411	5 60
	Bausch & Lomb Opt. Co.	Supplies	1412	24 03
	Amer. Aristotype Co.	"	1413	9 24
	Chic. Lab. Sup. Co.	"	1414	95 40
	Kauffman-Lattimer Co.	Drugs and Sundries	1415	168 88
	Acme Paving Co.	Cementing bath room	1416	28 65
	Wolfram Guitar Co.	Piano rent	1417	7 50
	McAllister, Moh. & Co.	Two stands	1418	2 00
	Domestic Laundry	Towels for November	1419	28 25
	Burrows Bros. Co.	Books, etc	1420	73 45
	Seraphim Book Bdg. Co.	Binding	1421	14 60
	C. of B. of E. N. Dept.	Nautical almanac	1422	3 00
	N. P. Hyndeman	Map Pgh. coal region	1423	4 00
	H. Braun Sons & Co.	Supplies	1424	22 75
	Spahr & Glenn	Printing	1425	45 00
	Engelke & Bigelow	Freight and cartage	1426	37 55
	Krauss, Butler & B. Co.	Shades	1427	19 00
	Cherington P. & E. Co.	Stamps	1428	75
	Nitschke Bros	Printing, etc	1429	13 00
	E. Doddington & Co.	Lumber, etc	1430	127 80
	Hann & Adair	Printing	1431	30 94
	Champlin Printing Co.	"	1432	64 75
	Tallmadge Hdw. Co.	Supplies	1433	34 40
	G. E. Stechert	Books	1434	85 02
	M. C. Lilley & Co.	Supplies	1435	73 50
	J. M. & W. Westwater	"	1436	77 10
	W. U. Tel. Co.	Telegrams	1437	2 11
	A. S. W. Huffman	Supplies	1438	27 82
	Erner & Hopkins	"	1439	20 72
	R. A. McClure	Stakes	1440	6 25
	H. Haerlein	Profess. services	1441	47 60

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Dec. 9	Reserve Cons. Co.	1000 bricks	1442	$7 50
	Electric Appl. Co.	Supplies	1443	48 70
	Fultonham B. & Tile Co.	Brick	1444	138 00
	E. C. Niederlander	Painting signs	1445	4 20
	W. D. Gibbs	Drayage, etc	1446	60
	Gus. C. Henning	Pocket recorder	1447	112 50
	Crosby St. G. & V. Co.	Steam fittings	1448	29 10
	G. H. Barnes	Calorimeter connections	1449	5 00
	Alpha Dairy Co.	Milk tickets	1450	2 56
	Lawton & Co.	Paper and inks	1451	6 50
	Hager & Graves	Groceries	1452	38 99
	Col. Gas Co.	Welsbach lights	1453	1 50
	Eimer & Amend	Chart, stopples, etc	1454	17 46
	Gardiner M. Lane	Book	1455	3 48
	Charles W. Harper	Adv. cuts	1456	8 05
	Kelton & Converse	Lumber	1457	2 70
	McClelland & Co.	Supplies	1458	10 65
	Richmond Chair Co.	Chairs	1459	75 00
	Col. Wire and Iron Wks.	Mats	1460	10 50
	Strobridge Litho. Co.	Commissions & warrants	1461	35 00
	Moneypenny-Ham'd. Co.	500 Bull	1462	4 50
	Orvis & Marshall	Carbon paper	1463	3 00
	Webb. Sta. & Ptg. Co.	Office supplies	1464	13 35
	Masury, Young & Co.	Cyl. oil	1465	18 03
	L. Hirsch, Prest.	Adv. in German paper.	1466	16 00
	Stumpf & Steurer	Advertising	1467	32 00
	Lawrence Pub. Co.	"	1468	192 78
	O. S. Journal Co.	"	1469	15 00
	Schoedinger, F'rn & Co.	Screws and washers	1470	40
	Oscar S. Lear	Paper and ink	1471	4 00
	Elec. Sup. & Cons. Co.	Wire	1472	2 84
	F. G. Howall & Co.	Rollers	1473	50
	Z. L. White & Co.	Cheese cloth	1474	1 00
	Cap. City Mchn. Works.	Supplies	1475	38 50
	Osborn, Will's & Horn.	Coal	1476	31 42
	Murray City Coal Co.	"	1477	485 93
	C. L. Wottring	Manure	1478	19 50
	The Macmillan Co.	Bonar Malthus	1479	3 19
	Charles Dury	Expense sea lion skins	1480	15 00
	J. C. Pugh	Mounting charts	1481	11 00
	Riddle & Son	Cans and repairs	1482	6 15
	Columbus Gas Co.	Coke	1483	9 62
	Col. Tent & Awning Co.	Strainers	1484	7 20
	Haussmann & Dunn	Instruments	1485	18 00
	Sells & Co.	Feed	1486	20 75
	Pitz Bros	Two tons shorts	1487	28 00
	Glucose Sugar Ref. Co.	Gluten meal	1488	84 00
	Blackwood, Green & Co.	Repairs and supplies	1489	8 17
	Creamery Pkg, Mfg. Co.	Jars, brushes, etc	1490	51 63
	R. M. Ramsey	1 box Lenox soap	1491	3 25
	Wm. Burdell, Jr.	Pipe, repairs, etc	1492	89 02
	W. H. Anderson & Co.	Mass. and N. Y. Reports	1493	4 75
	James Ohlen Sons & Co.	27 foot steel	1494	6 75
	G. G. Quincy & Co.	Sheeting	1495	4 00
	The L. S. Starrett Co.	Supplies	1496	12 90
	The Jeffrey Mfg. Co.	Shafting, etc	1497	53 21
	Nicholson File Co.	Files	1498	20 80
	Cincinnati S. & T. Co.	Bolts, nuts, etc	1499	34 61
	Yost & Packard	Services as architects	1500	35 00
	J. S. Abbott & Co.	Supplies	1501	13 69
	Batterson Decorative Co.	Working in house	1502	41 35

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Dec. 9	J. J. Gheen	Plastering	1503	$3 60
	J. C. Howard	Painting	1504	95 00
	Hanna Paint Mfg. Co.	1 gallon golden gloss	1505	3 50
	C. T. Phillips	Papering etc	1506	26 15
	Col. Supply Co	Supplies	1507	42 43
	Lily Weeks	Gym. work	1508	5 00
	M. J. Kellenberger	Work	1509	25 00
	Thos. F. Hunt	Salary Dec. 1899	1510	250 00
16	W. O. Thompson	" "	1511	416 67
	Alexis Cope	" "	1512	187 50
	Carl E. Steeb	" "	1513	50 00
	Katherine Duncan	" "	1514	54 17
	G. W. Knight	" "	1515	250 00
	W. F. Hunter	" "	1516	250 00
	A. M. Bleile	" "	1517	225 00
	C. N. Brown	" "	1518	225 00
	A. C. Barrows	" "	1519	225 00
	R. D. Bohannon	" "	1520	225 00
	B. L. Bowen	" "	1521	225 00
	S. C. Derby	" "	1522	225 00
	J. V. Denney	" "	1523	225 00
	E. A. Eggers	" "	1524	225 00
	J. P. Gordy	" "	1525	225 00
	W. A. Kellerman	" "	1526	225 00
	W. R. Lazenby	" "	1527	225 00
	Wm. McPherson	" "	1528	225 00
	W. F. Magruder	" "	1529	225 00
	H. Osborn	" "	1530	225 00
	J. R. Smith	" "	1531	225 00
	W. H. Scott	" "	1532	225 00
	B. F. Thomas	" "	1533	225 00
	H. A. Weber	" "	1534	225 00
	N. W. Lord	" "	1535	200 00
	F. A. Ray	" "	1536	200 00
	G. B. Kauffman	" "	1537	200 00
	Edward Orton	" "	1538	180 00
	J. N. Bradford	" "	1539	180 00
	F. E. Sanborn	Sal., bal. of Sept–Oct.	1540	240 00
	H. C. Lord	Salary, Dec., 1899	1541	160 00
	F. C. Clark	" "	1542	160 00
	G. W. McCoard	" "	1543	160 00
	C. P. Linhart	" "	1544	160 00
	D. S. White	" "	1545	160 00
	F. C. Caldwell	" "	1546	160 00
	E. A. Hitchcock	" "	1547	150 00
	C. S. Prosser	" "	1548	150 00
	W. D. Gibbs	" "	1549	160 00
	P. G. Bowman	" "	1550	140 00
	W. H. Page	" "	1551	140 00
	W. H. Siebert	" "	1552	135 00
	S. A. Norton	" "	1553	120 00
	E. B. Kinkead	" "	1154	120 00
	J. E. Boyd	" "	1555	120 00
	H. C. Allen	" "	1556	115 00
	C. E. Sherman	" "	1557	110 00
	T. E. French	" "	1558	110 00
	J. R. Taylor	" "	1559	110 00
	C. W. Mesloh	" "	1560	110 00
	A. W. Hodgman	" "	1561	110 00
	J. H. Schaffner	" "	1562	100 00
	W. E. Henderson	" "	1563	100 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1899				
Dec. 16	J. A. Bownocker	Salary, Dec., 1899	1564	$100 00
	W. A. Knight	" "	1565	100 00
	C. L. Arnold	" "	1566	100 00
	K. D. Swartzel	" "	1567	100 00
	C. B. Morrey	" "	1568	100 00
	W. L. Graves	" "	1569	100 00
	C. A. Bruce	" "	1570	100 00
	F. M. Hamilton	" "	1571	80 00
	G. H. McKnight	" "	1572	90 00
	Wm. Renck	" "	1573	85 00
	J. S. Hine	" "	1574	85 00
	F. L. Landacre	" "	1575	85 00
	C. P. Crowe	" "	1576	80 00
	A. E. Vinson	" "	1577	80 00
	F. E. Kester	" "	1578	80 00
	S. E. Canfield	" "	1579	75 00
	E. O. Randall	" "	1580	70 00
	D. F. Pugh	" "	1581	95 00
	W. F. Lavery	" "	1582	70 00
	C. B. Frederick	" "	1583	70 00
	J. B. Sanborn	" "	1584	70 00
	E. E. Somermeier	" "	1585	70 00
	T. K. Lewis	" "	1586	60 00
	F. A. Fish	" "	1587	60 00
	O. V. Brumley	" "	1588	50 00
	Silas Martin	" "	1589	50 00
	A. V. Bleininger	" "	1590	40 00
	J. B. Parker	" "	1591	30 00
	M. Dresbach	" "	1592	30 00
	D. A. Kohr	" "	1593	60 00
	H. C. Gore	" "	1594	30 00
	J. H. Vosskuehler	" "	1595	30 00
	A. H. McIntire	" "	1596	30 00
	E. L. Ball	" "	1597	30 00
	J. W. Young	" "	1598	30 00
	F. J. Hale	" "	1599	30 00
	H. W. Brown	" "	1600	25 00
	S. W. Collett	" "	1601	25 00
	J. H. Collins	" "	1602	20 00
	J. A. Shauck	" "	1603	17 50
	E. H. Bailey	" "	1604	15 00
	R. E. McIntosh	" "	1605	12 50
	W. C. McCracken	" "	1606	150 00
	O. B. Jones	" "	1607	135 00
	E. E. Harold	" "	1608	90 00
	J. P. Covan	" "	1609	70 00
	G. R. Rose	" "	1610	65 00
	F. Ruhlen	" "	1611	60 00
	A. F. Hall	" "	1612	60 00
	E. D. Cockins	" "	1613	58 33
	C. B. Guittard	" "	1614	55 00
	H. N. Townshend	" "	1615	55 00
	G. Kellicott	" "	1616	55 00
	M. D. Jeffrey	" "	1617	55 00
	Lucy Allen	" "	1618	55 00
	C. M. Low	" "	1619	54 17
	F. K. Luke	" "	1620	50 00
	W. Standley	" "	1621	50 00
	B. LeBay	" "	1622	50 00
	D. C. Huddleson	" "	1623	50 00
	T. Boude	" "	1624	45 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Dec. 16	W. H. Case	Salary, Dec., 1899	1625	$45 00
	M. Peck	" "	1626	40 00
	A. Chantler	" "	1627	45 00
	G. A. Goodspeed	" "	1628	40 00
	J. H. Brown	" "	1629	40 00
	D. D. Geren	" "	1630	40 00
	W. Whitestine	" "	1631	40 00
	H. Chantler	" "	1632	40 00
	G. C. Denny	" "	1633	40 00
	M. N. Cook	" "	1634	40 00
	T. E. Osburn	" "	1635	40 00
	W. Townsel	" "	1636	25 00
	J. Garrettson	" "	1637	37 39
	E. R. Hubler	" "	1638	33 33
	James Kelley	" "	1639	25 00
	W. C. Weir	" "	1640	20 00
	J. D. Decker	" "	1641	140 00
	Alice Dufour	" "	1642	25 00
	J. F. Jeffrey	" "	1643	10 00
	J. W. Groves	" "	1644	50 00
	Wm. Cannan	" "	1645	20 00
	W. E. Mann	" "	1646	25 00
	Grace Pitts	" "	1647	30 00
	W. C. Mills	" "	1648	35 00
	E. H. Moore	" "	1649	20 00
	F. O. Clements	" "	1650	45 00
	H. C. Price	" "	1651	60 00
	C. L. E. Moore	" "	1652	10 00
	C. A. Grate	" "	1653	30 00
	W. A. Landacre	" "	1654	70 00
	N. P. Oglesby	" "	1655	40 00
	C. F. Dowd	" "	1656	20 00
	Benj. Irwin	" "	1657	45 00
	J. C. Perry	" "	1658	12 50
	A. G. McCall	" "	1659	20 00
	W. Conklin	" "	1660	40 00
	Earl Conway	" "	1661	20 00
	C. H. Woodruff	" "	1662	65 00
15	Helen Potts	Accp. in gym	1663	5 50
	Edith Seymour	" "	1664	3 00
	Lily Weeks	Gym. work	1665	5 00
1900				
Jan. 5	Col. Gas Co	Gas for December	1666	136 42
	Wm. Cannan	Fee and store room	1667	12 50
	Lily Weeks	Salary, one week	1668	5 00
	R. M. Rownd, P. M.	Stamped envelopes	1669	85 60
	Frank C. White	Return fees, pro rata	1670	5 00
	C. R. Monsarrat	Fees C. H. Evans	1671	5 00
	Edna Luse	Return of fees	1672	5 00
	Daniel C. Keller	" "	1673	8 00
	Blanche Powell	" "	1674	5 00
	E. D. Easton	" "	1675	7 00
	Mary E. Dow	" "	1676	6 00
	Morton Farrar	" "	1677	9 75
	Engelke & Bigelow	Freight and drayage	1678	62 72
	Murray City Coal Co.	Coal	1679	950 56
	Osborn, Will's & Horn.	"	1680	57 42
	H. J. Hammond	Hospital supplies	1681	15 97
	C. B. Frederick	Anatomy horses	1682	38 50
	Fred Fleischer	Hauling coal	1683	39 00
	J. S. Abbott & Co.	Glass, putty, etc.	1684	49 03

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Dec. 5	E. Doddington & Co...	Lumber, etc.....	1685	$34 52
	S. T. Hallsman.....	Labor	1686	6 30
	A. F. Wilcox.....	"	1687	20 75
	Wilbert Morelan	Carpenter work	1688	19 00
	E. J. Barton.....	" "	1689	16 50
	J. H. Randall.....	" "	1690	30 75
	The Tallmadge Hdw. Co.	Hardware, etc.....	1691	20 13
	Kelton & Converse.....	Lumber	1692	7 00
	Yale & Towne Mfg. Co.	Locks and keys.....	1693	2 45
	The Fish Stone Co.....	One sill and dray.....	1694	1 30
	M. C. Hunter.....	Work	1695	28 55
	Harry Kinnear	Wiring	1696	26 55
	Mason Snow	Student labor	1697	9 60
	R. D. DeWolf.....	" "	1698	10 54
	Andrew Spittal	Labor	1699	29 76
	F. E. Sanborn.....	Money advanced	1700	48 00
	F. C. Clark.....	Supplies	1701	4 75
	Taylor, Williams & Co.	Coal	1702	6 25
	Laura L. Hill.....	Clerical work	1703	12 50
	A. F. Wilcox.....	Labor	1704	17 30
	S. N. Young.....	"	1705	9 45
	J. H. Randall.....	"	1706	4 25
	J. W. Shaw.....	"	1707	7 95
	Grace Young	"	1708	3 35
	W. D. Gibbs, Mgr.....	500 copies book.....	1709	18 00
	Metta Seymour	Clerical services	1710	4 65
	S. C. Derby.....	Lantern slides	1711	9 35
	C. L. Sackett.....	Part pay. of contract...	1712	58 33
	James LeBay	Cleaning cistern	1713	3 00
	Gustav Bruder	Band instruction	1714	24 00
	F. C. McKinney.....	Student labor	1715	10 00
	C. E. Miller.....	Plan and blue prints....	1716	19 25
10	Philip Long	Buffet lunch and meals..	1717	148 20
	F. C. Long.....	Guide work	1718	2 88
	Roy Thompson	"	1719	3 88
	W. G. Wallace.....	"	1720	3 75
	Annis McLaughlin	Clerical work	1721	2 55
	Wm. T. Magruder.....	Money advanced	1722	3 50
	Earl Orndorff	Guide work	1723	5 25
	Helen Powell	Clerical work	1724	4 50
	F. J. Hale.....	Labor	1725	12 53
	Grace Eagleson	Clerical work	1726	2 55
	E. G. Bailey.....	Labor	1727	6 25
	C. P. Linhart.....	Supplies	1728	3 00
	O. I. Dick.....	Student labor	1729	4 93
	J. M. Barringer.....	"	1730	1 95
	J. C. Britton.....	"	1731	1 50
	Wm. R. Lazenby.....	Department supplies ...	1732	4 35
	S. A. Norton.....	Book	1733	2 90
	Olive Jones	Money advanced	1734	11 48
	American Book Co.....	Book	1735	40 00
	Hann & Adair.....	Printing questions	1736	2 75
	Edward Thompson & Co.	Am. Ency. Law.....	1737	6 00
	W. H. Anderson & Co..	Reports	1738	8 50
	Sunday Creek Coal Co..	Coal	1739	30 03
	James Seaman	Insect cases	1740	40 00
	George Wahr	Books	1741	7 50
	Samuel Henshaw.....	Subs. to Psyche.....	1742	5 00
	Library Bureau	Cabinets and cards.....	1743	32 50
	R. R. Bowker.....	2 copies state publicat'ns	1744	4 00
	The Boston Book Co...	Books	1745	1 60

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 10	G. E. Stechert	Books, etc	1746	$5 20
	W. H. Loudermilk & Co.	President's message	1747	4 56
	G. P. Humphreys	Colonial tracts	1748	5 50
	The Seraphim B. B. Co.	Binding	1749	36 45
	Louis Siebert	Knives and pincers	1750	1 35
	Burrows Bros. Co	Books	1751	61 15
	Chicago Blue P. P. Co.	Blue print paper	1752	2 40
	Emil Greiner	Tubes, etc	1753	12 25
	Kauffman, Lattimer	Drugs and sundries	1754	170 54
	Eimer & Amend	Chemicals	1755	96 20
	Keyless Lock Co	Locks and repairs	1756	3 75
	Domestic Laundry	Laundry work	1757	17 75
	The H. Cole Co	Supplies	1758	26 49
	Bausch & Lomb Opt. Co.	No. 22 Coddington	1759	1 15
	G. W. Clarke & Co	Stakes	1760	5 38
	L. P. Bailey	Advertisement	1761	12 00
	H. Goldsmith	Music and repairs	1762	5 95
	L. C. Maddox	Advertisement	1763	10 0
	Nat. Stockman & Farm.	"	1764	78 25
	Perry Smythe	Framing picture	1765	5 10
	Akron China Co	Bisque wall	1766	1 00
	Col. Sewer Pipe Co	Pipes	1767	85
	J. & G. Butler	1 box soap	1768	7 50
	Schaffer & Budenberg	1 Tachometer and charts	1769	156 50
	Crosby S. G. & V. Co	Repairing	1770	4 56
	Mrs. Weisner, Secy.	Adv. in Rep. W. C. T. U.	1771	15 00
	Adams & Bagnall Co	Globes, etc	1772	3 66
	J. S. Bushnell	Paper and cord	1773	5 20
	W. H. Miller Co	Supplies	1774	215 56
	Col. Machine Co	Rubber	1775	2 00
	Crane & Co	Valves	1776	9 18
	West. Union Tel. Co	Telegrams	1777	1 54
	India Alk. Wks	1 barrel savogran	1778	17 94
	The Lunkenheimer Co.	Valves, etc	1779	25 06
	B. F. Goodrich Co	Mats, etc	1780	30 28
	Webb Sta. & Print. Co.	Office supplies	1781	18 15
	John Wanamaker	Books	1782	25 60
	Standard Oil Co	Oil and gasoline	1783	13 64
	W. S. Orvis	Paper and ribbon	1784	3 90
	Cent. O. Paper Co	Paper	1785	92 30
	Nonotuck Silk Co	Silk cult. cabinet	1786	2 50
	Kemp & Burpee Mg. Co.	Manure spreader	1787	50 00
	J. H. & F. A. Heyl	Lumber	1788	16 55
	Creamery Pkg. Mfg. Co.	Caps and supplies	1789	23 05
	W. B. Smith & Son	Cow	1790	50 00
	Alpha Dairy Co	Milk tickets	1791	2 00
	Lewis Fink	Decorating, etc	1792	41 85
	Col. Brass Co	Closet and lid	1793	12 90
	C. L. Wottring	Manure	1794	5 00
	Haydenville M. & M. Co.	Fireclay	1795	2 50
	Franklin Toilet Co	Towel service	1796	1 95
	J. Carbutt	Plates	1797	1 41
	J. T. Barlow	Freezing	1798	10 80
	Col. Gas Co	Coke	1799	10 20
	Col. Wire & Iron Wks.	Matting and device	1800	5 88
	A. T. Thompson & Co	Lamp and stand	1801	24 00
	E. G. Soltmann	Frames	1082	14 00
	McClelland & Co	Book	1803	60
	Keuffel & Esser Co	Engineering instruments	1804	48 00
	Westinghouse Co	Coils, etc	1805	44 00
	The Col. M. & M. S. Co.	Hose	1806	10 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 10	Arthur Geren	Supplies	1807	$5 53
	E. Doddington & Co.	Lumber	1808	23 97
	Fred Charles	Hauling	1809	5 36
	Blackwood, Green & Co.	Supplies	1810	23 37
	McMillan Co	Books	1811	8 06
	Champlin Printing Co.	Printing	1812	21 65
	Col. Supply Co.	Supplies	1813	6 87
	J. M. & W. Westwater.	Lts and sockets	1814	6 36
	Schoedinger, F'rn & Co.	Supplies	1815	3 60
	Chicago Lab. Sup. Co.	"	1816	54 20
	Nitschke Bros	Printing	1817	24 95
	Tallmadge Hdw. Co.	Supplies	1818	7 78
	Elec. Appliance Co.	Wire and switches	1819	24 81
	Erner & Hopkins.	Supplies	1820	26 24
	Spahr & Glenn.	Printing	1821	15 00
	Westinghouse Co	Transformer	1822	111 30
	Franklin Toilet Co.	Towel service	1823	2 25
15	Lily Weeks	Gym. services	1824	5 00
20	Michigan Brush Co.	Brushes	1825	22 05
22	W. O. Thompson	Salary Jan. 1900	1826	416 67
	Carl E. Steeb	" "	1827	60 00
25	Alexis Cope	" "	1828	187 50
27	Katherine Duncan	" "	1829	54 17
	T. F. Hunt	" "	1830	250 00
	G. W. Knight	" "	1831	250 00
	W. F. Hunter	" "	1832	250 00
	A. M. Bleile	" "	1833	225 00
	C. N. Brown	" "	1834	225 00
	A. C. Barrows	" "	1835	225 00
	R. D. Bohannon	" "	1836	225 00
	B. L. Bowen	" "	1837	225 00
	S. C. Derby	" "	1838	225 00
	J. V. Denney	" "	1839	225 00
	E. A. Eggers	" "	1840	225 00
	J. P. Gordy	" "	1841	225 00
	W. A. Kellerman	" "	1842	225 00
	W. R. Lazenby	" "	1843	225 00
	Wm. McPherson	" "	1844	225 00
	W. T. Magruder	" "	1845	225 00
	H. Osborn	" "	1846	225 00
	J. R. Smith	" "	1847	225 00
	W. H. Scott	" "	1848	225 00
	B. F. Thomas	" "	1849	225 00
	H. A. Weber	" "	1850	225 00
	N. W. Lord	" "	1851	200 00
	F. A. Ray	" "	1852	200 00
	G. B. Kauffman	" "	1853	200 00
	Edward Orton	" "	1854	180 00
	J. N. Bradford	" "	1855	180 00
	F. E. Sanborn	" "	1856	200 00
	H. C. Lord	" "	1857	160 00
	F. C. Clark	" "	1858	160 00
	G. W. McCoard	" "	1859	160 00
	C. P. Linhart	" "	1860	160 00
	D. S. White	" "	1861	160 00
	F. C. Caldwell	" "	1862	160 00
	E. A. Hitchcock	" "	1863	150 00
	C. S. Prosser	" "	1864	150 00
	W. D. Gibbs	" "	1865	160 00
	P. G. Bowman	" "	1866	140 00
	W. H. Page	" "	1867	140 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 27	W. H. Siebert	Salary Jan. 1900	1868	$135 00
	S. A. Norton	" "	1869	120 00
	E. B. Kinkead	" "	1870	120 00
	J. E. Boyd	" "	1871	120 00
	J. E. Allen	" "	1872	115 00
	C. E. Sherman	" "	1873	110 00
	T. E. French	" "	1874	110 00
	J. R. Taylor	" "	1875	110 00
	C. W. Mesloh	" "	1876	110 00
	A. W. Hodgman	" "	1877	110 00
	J. H. Schaffner	" "	1878	110 00
	W. E. Henderson	" "	1879	100 00
	J. A. Bownocker	" "	1880	100 00
	W. A. Knight	" "	1881	100 00
	C. L. Arnold	" "	1882	100 00
	K. D. Swartzel	" "	1883	100 00
	C. B. Morrey	" "	1884	100 00
	W. L. Graves	" "	1885	100 00
	C. A. Bruce	" "	1886	100 00
	F. M. Hamilton	" "	1887	80 00
	Geo. H. McKnight	" "	1888	90 00
	W. A. Landacre	" "	1889	70 00
	Wm. Renck	" "	1890	85 00
	J. S. Hine	" "	1891	85 00
	F. L. Landacre	" "	1892	85 00
	C. P. Crowe	" "	1893	80 00
	A. E. Vinson	" "	1894	80 00
	C. P. Souther	" "	1895	80 00
	F. E. Kester	" "	1896	80 00
	S. E. Canfield	" "	1897	75 00
	E. O. Randall	" "	1898	70 00
	D. F. Pugh	" "	1899	95 00
	W. F. Lavery	" "	1900	70 00
	C. B. Frederick	" "	1901	70 00
	J. B. Sanborn	" "	1902	70 00
	E. E. Somermeier	" "	1903	70 00
	T. K. Lewis	" "	1904	60 00
	F. A. Fish	" "	1905	60 00
	O. V. Brumley	" "	1906	50 00
	Silas Martin	" "	1907	50 00
	A. V. Bleininger	" "	1908	40 00
	J. B. Parker	" "	1909	30 00
	M. Dresbach	" "	1910	30 00
	D. A. Kohr	" "	1911	30 00
	H. C. Gore	" "	1912	30 00
	J. H. Vosskuehler	" "	1913	30 00
	A. H. McIntire	" "	1914	30 00
	E. L. Ball	" "	1915	30 00
	J. W. Young	" "	1916	30 00
	C. A. Grate	" "	1917	30 00
	F. J. Hale	" "	1918	30 00
	S. W. Collett	" "	1919	25 00
	H. W. Brown	" "	1920	25 00
	J. H. Collins	" "	1921	20 00
	J. A. Shauck	" "	1922	17 50
	E. G. Bailey	" "	1923	15 00
	R. E. McIntosh	" "	1924	12 50
	W. C. McCracken	" "	1925	150 00
	O. B. Jones	" "	1926	135 00
	E. E. Harrold	" "	1927	90 00
	J. P. Covan	" "	1928	70 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 27	G. A. Rose	Salary Jan. 1900	1929	$65 00
	F. Ruhlen	" "	1930	60 00
	A. F. Hall	" "	1931	60 00
	E. D. Cockins	" "	1932	58 33
	C. B. Guittard	" "	1933	55 00
	H. N. Townshend	" "	1934	55 00
	G. S. Kellicott	" "	1935	55 00
	Maude Jeffrey	" "	1936	55 00
	Lucy Allen	" "	1937	55 00
	C. M. Low	" "	1938	54 17
22	Lily Weeks	Gym. work	1939	5 00
27	F. K. Luke	Salary Jan. 1900	1940	50 00
	H. C. Price	" "	1941	60 00
	W. Standley	" "	1942	50 00
	B. LeBay	" "	1943	50 00
	D C. Huddleson	" "	1944	50 00
	T. Boude	" "	1945	45 00
	W. H. Case	" "	1946	45 00
	M. Peck	" "	1947	40 00
	A. Chantler	" "	1948	45 00
	G. A. Goodspeed	" "	1949	40 00
	J. H. Brown	" "	1950	40 00
	D. D. Geren	" "	1951	40 00
	W. Whitestine	" "	1952	40 00
	H. Chantler	" "	1953	40 00
	G. C. Denney	" "	1954	40 00
	M. N. Cook	" "	1955	40 00
	F. E. Osborn	" "	1956	40 00
	W. Townsel	" "	1957	25 00
	J. C. Perry	" "	1958	12 50
	J. Garrettson	" "	1959	37 39
	E. R. Hubler	" "	1960	33 33
	J. Kelly	" "	1961	25 00
	W. C. Weir	" "	1962	20 00
	A. G. McCall	" "	1963	20 00
	C. H. Woodruff	" "	1964	65 00
	E. Conway	" "	1965	20 00
	W. Conklin	" "	1966	40 00
	Benj. Irwin	" "	1967	45 00
	C. F. Dowd	" "	1968	20 00
	N. P. Oglesby	" "	1969	40 00
	J. W. Decker	" "	1970	140 00
	A. Dufour	" "	1971	25 00
	J. W. Groves	" "	1972	50 00
	W. Cannan	" "	1973	20 00
	W. E. Mann	" "	1974	25 00
	Grace Pitts	" "	1975	30 00
	Wm. C. Mills	" "	1976	35 00
	E. H. Moore	" "	1977	20 00
	C. L. E. Moore	" "	1978	10 00
	J. F. Jeffrey	" "	1979	10 00
	E. Smith	" "	1980	33 33
	D. A. Crowner	" "	1981	33 33
	C. S. Prosser	Office supplies	1982	1 45
	M. J. Kellenberger	Services	1983	21 43
	D. A. Kohr	Bal. of January salary	1894	30 00
Feb. 1	Lily Weeks	Janitress	1985	5 00
6	Lily Weeks	Gym. services	1986	5 00
7	Col. Gas Co.	Gas for January	1987	161 02
8	Nora Heath	Excess of fees, act 3, 14,' 89	1988	2 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Jan. 12	Lily Weeks	Salary	1989	$5 00
15	C. N. Mooney	Stamp and pad	1990	1 25
	Arthur Geren	Drawing utensils	1991	5 40
	W. L. Redrow	Lab. assistance	1992	17 75
	C. P. Linville	" "	1993	5 80
	F. C. Clark	Dept. supplies	1994	3 55
	James G. Sterling	Student labor	1995	6 88
	Frank W. Arnold	" "	1996	3 75
	Wm. Erdman	" "	1997	3 00
	M. C. Hunter	" "	1998	12 30
	O. I. Dick	" "	1999	9 23
	B. B. Wells	" "	2000	8 03
	B. F. Thomas	Dept. supplies	2001	5 61
	Andrew Spittal	Labor	2002	83 47
	M. C. Hunter	"	2003	2 48
	R. E. McIntosh	"	2004	10 88
	Ray McCallum	Adv. in student direc'y.	2005	5 00
	M. B. Lamb	Flooring stalls	2006	4 80
	H. J. Hammond	Hospital supplies	2007	3 60
	Fred Fleischer	Wheeling coal	2008	16 50
	Richard Spencer	" "	2009	24 75
	E. H. Barton	Carpentry	2010	55 00
	A. F. Wilcox	"	2011	11 80
	Wilbert Morlan	"	2012	15 50
	J. W. Cawthon	"	2013	1 50
	J. H. Randall	"	2014	3 25
	Stella E. Canfield	Dept. supplies	2015	1 75
	Helen Potts	Piano playing	2016	4 00
	S. T. Hallsman	Painting	2017	80
	J. V. Denney	Department supplies	2018	2 00
	S. T. Barrows	Lang's Homer	2019	98
	J. A. Beer	Laboratory assistance	2020	3 60
	M. Dresbach	Department supplies	2021	7 62
	Metta Seymour	Clerical work	2022	4 75
	E. G. Bailey	Labor	2023	7 20
	R. R. Harkins	Drafting engine	2024	3 75
	F. J. Hale	Drafting	2025	2 50
	Arthur Geren	Supplies	2026	1 80
	Charles R. Hall	Package	2027	50
	William Garret	Steam fitting	2028	1 50
	Roger DeWolf	Wiring	2029	3 15
	Harry Kinnear	"	2030	13 05
	Edw. Orton	Drafting	2031	12 00
	Wm. McPherson	Supplies	2032	3 15
	W. O. Thompson	Maps	2033	2 40
	F. C. McKinney	Guide	2034	4 50
	Roy Thompson	"	2035	4 13
	Frank C. Long	"	2036	3 88
	W. G. Wallace	"	2037	9 13
	E. L. Orndorff	"	2038	4 00
	H. C. Herrick	"	2039	90
	Edith Seymour	Piano playing	2040	2 50
	R. W. Funk	Work in store room	2041	25 00
	J. W. Shaw	Assistance law library	2042	9 45
	S. N. Young	Library work	2043	10 90
	Mabel Huddleson	Library work	2044	10 50
	Mason Snow	Work in law library	2045	11 50
	J. M. & W. Westwater	Supplies	2046	10 00
	Cap. City Mchn. Wks.	"	2047	26 62
	Cherington P. & E. Co.	Stamp and pad	2048	1 10
	Nitschke Bros	Printing	2049	3 40

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Feb. 15	The McMillan Co.....	Books	2050	$8 01
	Franklin Toilet Sup. Co.	Towel service	2051	6 75
	Palmer & Beck.....	Supplies	2052	39 61
	The Tallmadge Hd. Co.	Hardware	2053	21 14
	Spahr & Glenn.....	Printing	2054	12 75
	Schoedinger, F'rn & Co.	Hardware	2055	29 58
	James Penn	Freight and drayage....	2056	3 04
	Blackwood, Green & Co.	Hardware	2057	44 26
	E. Doddington & Co....	Lumber	2058	23 74
	Bausch & Lomb Opt. Co.	Supplies	2059	5 20
	Columbus Supply Co...	Department supplies ...	2060	49 16
	G. E. Stechert.....	Books	2061	76 37
	Cent. O. Paper Co.....	Paper	2062	10 16
	H. Braun Sons & Co....	Instruments	2063	14 96
	Champlin Printing Co..	Printing	2064	17 50
	Hann & Adair.....	"	2065	2 85
	Miller Furniture Co....	Furniture	2066	47 90
	Murray City Coal Co...	Coal	2067	1,247 46
	Pharm. Rev. Pub. Co..	1 copy review for 1 year	2068	2 50
	Helman-Taylor Co	Index	2069	10 00
	Library Bureau	Cabinets and subscrip.	2070	33 00
	Engelke & Bigelow.....	Freight and drayage....	2071	61 89
	Nat. Educational Assn.	Volume proceedings	2072	2 00
	C. A. Waldo.....	Proocedings, Vol VII..	2073	2 00
	H. L. Fairchild.....	Geol. Soc. of Am. Vol X	2074	5 00
	R. R. Bowker.....	Society publications	2075	2 50
	Am. S. of Mech. Eng..	Copy proceedings.....	2076	1 25
	Seraphim B. B. Co.....	Binding	2077	29 90
	Burrows Bros. & Co....	Books	2078	99 03
	Ohio Furn. Co.....	Case and book case....	2079	31 00
	West. Elec. Inst. Co....	Supplies	2080	21 18
	Hann & Adair.....	Printing	2081	20 16
	Domestic Laundry	Towel washing	2082	22 32
	Funk & Wagnalls.....	Cyclopedia	2083	6 00
	Houghton-Mifflin Co....	Books	2084	2 76
	T. Y. Crowell & Co.....	Book	2085	1 14
	John H. Grove.....	Insurance premium	2086	12 35
	Samuel Smith	Brush and blacking.....	2087	4 40
	Kelton & Converse.....	Lumber	2088	1 07
	E. A. Kinsey Co.....	Steel	2089	5 36
	Nicholson File Co.....	Files	2090	12 26
	G. B. Schulte Sons Co..	Steel	2091	10 60
	Spg. Mchn. & Tool Co..	Lathe	2092	570 00
	H. Kohlbusch	Weights	2093	6 04
	E. G. Smith.....	Calipers	2094	22 50
	Hyatt R. B. Co.....	Instrument	2095	7 59
	Hanna Paint Mfg. Co..	Paint and surfacer.....	2096	2 35
	Elec. Sup. & Const. Co..	Supplies	2097	33
	H. Cole Co.....	Telescope	2098	3 00
	W. I. Carruthers.....	Material and labor.....	2099	78 81
	Col. Gas Co.....	Coke	2100	8 16
	A. H. Cross, Mgr.....	Advertisement	2101	12 00
	Nat. Stockman & Farm.	Advertising	2102	63 00
	R. M. Donaldson.....	"	2103	5 00
	L. S. Wells.....	Books	2104	7 20
	Buntin Bros	Material for bandages...	2105	4 80
	L. P. Bailey.....	Advertisement	2106	4 00
	Reynolds Bros	Instruments	2107	6 60
	Sunday Creek Coal Co.	Coal	2108	49 88
	DeLaval Sep. Co.....	Rope belts	2109	1 75
	Watertown Ther. Co....	Thermometers	2110	9 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Feb. 15	C. L. Kiewert	Brushes	2111	$7 50
	Howe Scale Co	Supplies	2112	8 00
	Creamery Package Co.	Supplies	2113	58 77
	D. H. Burrell & Co	Apparatus	2114	64 14
	Osborn, Will's. & Horn	Coal	2115	34 22
	M. Armbruster & Sons.	Scenery repairing	2116	2 00
	Ed. P. Budge	Engrav. of Dr. Orton	2117	55 00
	Amer. Grange Bulletin	Advertising	2118	18 90
	Webb Sta. & Ptg. Co	Pad and ink	2119	75
	Globe Wernecke Co	Cabinet	2120	136 00
	W. S. Orvis	Ribbon	2121	1 00
	O. S. Lear	Type writer repairs	2122	4 00
	L. A. Harsh & Co	Mop pails	2123	3 00
	Standard Oil Co	Oil	2124	8 73
	J. M. Kerr	Window rubbers	2125	2 50
	McClelland & Co	Calendar pads	2126	55
	Leader Printing Co	Advertising	2127	12 50
	Central Union Tel. Co.	Telephone service	2128	86 03
	E. B. Vorhees, Secy	Mbrsp. ass. agr. colleges	2129	10 00
	Amer. Dist. Tel. Co	Rent of boxes	2130	27 00
	Logan McCormick	Picture frame	2131	2 95
	T. J. Dundon & Co	Sawdust	2132	3 00
	Standard Oil Co	Oil	2133	88
	Westingh'se E. Mfg. Co.	Coils	2134	3 00
	Penna. Fuel Co	Lump coal	2135	2 75
	Col. Bolt Works	Bolts	2136	3 20
	Stand. Thermometer Co.	Globes	2137	40
	Sterling Arc Lamp Co.	"	2138	1 00
	Col. M. & Mine Sup. Co.	Supplies	2139	19 14
	The Elec. S. & C. Co	"	2140	4 50
	Erner & Hopkins Co	"	2141	22 63
	Kauffman, Lattimer Co.	Drugs and sundries	2142	192 74
	Stillwell-Bierce-Smith-Vaile Co., The	Pumps, etc	2143	1 00
	Sherwood Mfg. Co	Awning	2144	72
	Schaffer & Budenburg	Thermometers	2145	18 00
	American Meter Co	Gauge meters	2146	7 90
	Deane Steam Pump Co.	Pumps	2147	202 35
	Andrew Kaiser	Sterilizers	2148	7 75
	Toledo Blade Co	Advertisement	2149	6 75
	Commercial Tribune Co.	"	2150	9 40
	Plain Dealer Pub Co	"	2151	7 90
	O. S. Journal Pub. Co.	"	2152	7 50
	Carl Braun	Pressed cork	2153	5 00
	Philip Neel	Printing labels	2154	2 53
	J. S. Abbott & Co	Hardware	2155	16 75
	Longmans, Green & Co.	Books	2156	1 79
	L. Gasteloecchi & Co	Carts	2157	14 03
	Dunn, Taft & Co	Dry goods	2158	4 65
	Crystal Ice Mfg. Co	Ice coupon book	2159	2 00
	Hager & Graves	Groceries	2160	47 50
	Alpha Dairy Co	Milk tickets	2161	3 00
	M. V. Mitchell & Son	Labor	2162	3 20
	Capital City Mach. Wks.	Iron grate	2163	6 30
	Flint & Walling Mfg. Co.	Figure 434A	2164	4 25
	The A. H. Andrews Co.	Hyloplate	2165	21 13
	Vogelgesang Fur. Co	Furnace repairs	2166	3 50
	The W. M. Taylor M. & Grate Co	Mantel and trim	2167	17 50
	The B. F. Goodrich Co.	Rubber mat.	2168	5 05
	Wm. Bebb	Painting	2169	5 95

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Feb. 15	W. F. Worcester	Stove grates	2170	$1 20
	Jacob Good	Carpentry	2171	69 35
	Einer & Amend	Chemicals	2172	10 05
	Emil Greiner	Supplies	2173	24 09
	Kimball & Matthews	"	2174	1 60
	Quaker City Rubber Co.	Tubing	2175	21 60
	Merck & Co.	Celloidin	2176	2 04
	H. Troemner	Weights, etc.	2177	12 26
	Denver Fire Clay Co.	Supplies	2178	228 85
	Kauffman-Lattimer Co.	Drugs and sundries	2179	43 72
	C. L. Vogel	Labor and material	2180	15 00
	A. G. Spaulding & Bro.	Lockers	2181	375 00
	Wm. Burdell, Jr.	Repairs	2182	3 25
	E. G. Saltmann	Blue print frames	2183	7 00
	Gustav Bruder	Band instruction	2184	42 00
24	Thomas F. Hunt	Salary Feb. 1900	2185	250 00
	Wm. D. Gibbs	" "	2186	160 00
	John W. Decker	" "	2187	140 00
	Frank Ruhlen	" "	2188	60 00
	H. A. Weber	" "	2189	225 00
	A. E. Vinson	" "	2190	80 00
	Geo. W. Knight	" "	2191	250 00
	John B. Sanborn	" "	2192	70 00
	A. M. Bleile	" "	2193	225 00
	C. B. Morrey	" "	2194	100 00
	M. Dresbach	" "	2195	30 00
	H. C. Lord	" "	2196	160 00
	W. A. Kellerman	" "	2197	225 00
	J. H. Schaffner	" "	2198	90 00
	C. W. Collett	" "	2199	25 00
	Alice Dufour	" "	2200	25 00
	Fred Luke	" "	2201	50 00
	Wm. McPherson	" "	2202	225 00
	S. A. Norton	" "	2203	120 00
	W. E. Henderson	" "	2204	100 00
	D. A. Kohr	" "	2205	60 00
	H. C. Gore	" "	2206	30 00
	J. F. Jeffrey	" "	2207	10 00
	C. N. Brown	" "	2208	225 00
	C. E. Sherman	" "	2209	110 00
	J. W. Groves	" "	2210	50 00
	Edward Orton, Jr.	" "	2211	180 00
	A. V. Bleininger	" "	2212	40 00
	P. G. Bowman	" "	2213	140 00
	C. P. Souther	" "	2214	80 00
	J. N. Bradford	" "	2215	180 00
	T. E. French	" "	2216	110 00
	T. K. Lewis	" "	2217	60 00
	J. H. Vosskuehler	" "	2218	30 00
	Silas Martin	" "	2219	50 00
	F. C. Clark	" "	2220	160 00
	J. P. Gordy	" "	2221	225 00
	Grace Pitts	" "	2222	30 00
	F. C. Caldwell	" "	2223	160 00
	F. A. Fish	" "	2224	60 00
	J. P. Covan	" "	2225	70 00
	A. C. Barrows	" "	2226	225 00
	J. R. Taylor	" "	2227	110 00
	W. H. Siebert	" "	2228	135 00
	J. A. Bownocker	" "	2229	100 00
	Charles Prosser	" "	2230	150 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Feb. 24	W. C. Mills	Salary Feb. 1900	2231	$35 00
	E. A. Eggers	" "	2232	225 00
	C. W. Mesloh	" "	2233	110 00
	E. H. Moore	" "	2234	20 00
	J. R. Smith	" "	2235	225 00
	A. W. Hodgman	" "	2236	110 00
	W. R. Lazenby	" "	2237	225 00
	H. C. Price	" "	2238	40 00
	F. E. Sanborn	" "	2239	200 00
	W. A. Knight	" "	2240	100 00
	C. P. Crowe	" "	2241	80 00
	W. H. Renck	" "	2242	85 00
	A. H. McIntyre	" "	2243	30 00
	S. C. Derby	" "	2244	225 00
	W. F. Hunter	" "	2245	250 00
	J. H. Collins	" "	2246	20 00
	J. A. Shauck	" "	2247	17 50
	E. B. Kinkead	" "	2248	120 00
	W. H. Page	" "	2249	140 00
	E. O. Randall	" "	2250	70 00
	D. F. Pugh	" "	2251	95 00
	O. B. Jones	" "	2252	135 00
	H. N. Townshend	" "	2253	55 00
	Gertrude Kellicott	" "	2254	55 00
	Maude Jeffrey	" "	2255	55 00
	Lucy Allen	" "	2256	55 00
	C. B. Guittard	" "	2257	55 00
	R. D. Bohannon	" "	2258	225 00
	G. W. McCoard	" "	2259	160 00
	C. L. Arnold	" "	2260	100 00
	K. D. Swartzel	" "	2261	100 00
	Emma L. Ball	" "	2262	30 00
	J. W. Young	" "	2263	30 00
	C. L. E. Moore	" "	2264	10 00
	W. T. Magruder	" "	2265	225 00
	E. A. Hitchcock	" "	2266	150 00
	F. J. Hale	" "	2267	30 00
	C. A. Grate	" "	2268	30 00
	A. F. Hall	" "	2269	60 00
	F. A. Ray	" "	2270	200 00
	N. W. Lord	" "	2271	200 00
	E. E. Somermeier	" "	2272	70 00
	G. B. Kauffman	" "	2273	200 00
	W. A. Landacre	" "	2274	70 00
	E. E. Harrold	" "	2275	90 00
	N. P. Oglesby	" "	2276	40 00
	W. H. Scott	" "	2277	225 00
	F. M. Hamilton	" "	2278	80 00
	C. P. Linhart	" "	2279	160 00
	S. E. Canfield	" "	2280	75 00
	D. C. Huddleson	" "	2281	50 00
	B. F. Thomas	" "	2282	225 00
	J. E. Boyd	" "	2283	120 00
	F. E. Kester	" "	2284	80 00
	H. W. Brown	" "	2285	25 00
	J. V. Denney	" "	2286	225 00
	W. L. Graves	" "	2287	100 00
	G. H. McKnight	" "	2288	90 00
	H. C. Allen	" "	2289	115 00
	J. B. Parker	" "	2290	30 00
	B. L. Bowen	" "	2291	225 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Feb. 24	C. A. Bruce	Salary Feb. 1900	2292	$100 00
	C. F. Dowd	" "	2293	20 00
	D. S. White	" "	2294	160 00
	W. F. Lavery	" "	2295	70 00
	C. B. Frederick	" "	2296	70 00
	O. V. Brumley	" "	2297	50 00
	H. M. Osborn	" "	2298	225 00
	Jas. S. Hine	" "	2299	85 00
	F. L. Landacre	" "	2300	85 00
	W. O. Thompson	" "	2301	416 67
	Alexis Cope	" "	2302	187 50
	Carl E. Steeb	" "	2303	60 00
	E. D. Cockins	" "	2304	58 33
	K. D. Duncan	" "	2305	54 17
	E. R. Hubler	" "	2306	33 33
	W. C. McCracken	" "	2307	150 00
	C. M. Low	" "	2308	54 17
	Wm. Standley	" "	2309	50 00
	Benj. LeBay	" "	2310	50 00
	Thos. Boude	" "	2311	45 00
	Wm. H. Case	" "	2312	45 00
	Marion Peck	" "	2313	40 00
	Geo. R. Rose	" "	2314	65 00
	Jos. Garrettson	" "	2315	87 39
	Benj. Irwin	" "	2316	45 00
	J. C. Perry	" "	2317	12 50
	G. A. Goodspeed	" "	2318	40 00
	R. E. McIntosh	" "	2319	12 50
	D. D. Geren	" "	2320	40 00
	T. E. Osborn	" "	2321	40 00
	J. H. Brown	" "	2322	40 00
	Wm. Whitestine	" "	2323	40 00
	G. C. Denny	" "	2324	40 00
	E. G. Bailey	" "	2325	15 00
	M. N. Cook	" "	2326	40 00
	W. Conklin	" "	2327	40 00
	H. Chantler	" "	2328	40 00
	A. Chantler	" "	2329	45 00
	Earl Conway	" "	2330	20 00
	James Kelly	" "	2331	25 00
	W. C. Weir	" "	2332	20 00
	Elisha Smith	" "	2333	33 33
	D. A. Crowner	" "	2334	33 33
	C. H. Woodruff	" "	2335	65 00
	W. Townsel	" "	2336	25 00
	Wm. Cannan	" "	2337	20 00
	W. E. Mann	" "	2338	25 00
	A. G. McCall	" "	2339	27 00
19	Ohio National Bank	Foreign money order	2340	3 40
	Ohio National Bank	" "	2341	106 55
20	Lily Weeks	Services	2342	5 00
21	Ohio National Bank	Foreign money order	2343	7 25
	A. McLaughlin	Clerical work	2344	2 55
26	M. J. Kellenberger	Services	2345	25 00
	Lily Weeks	Janitress	2346	4 00
March 1	A. J. Loyne	Return of fees	2347	30 00
5	Lily Weeks	Janitress	2348	5 00
7	Murray City Coal Co.	Coal	2349	932 79
6	Thos. J. Godfrey	Trustee expenses	2350	10 25
7	Engelke & Bigelow	Freight and drayage	2351	22 98
	Tracy-Wells Co	Supplies	2352	18 77

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 7	Kauffman-Lattimer Co.	Drugs and sundries.....	2353	$125 10
	Schoedinger, F'rn & Co.	Shears and nails.....	2354	2 75
	Payne McD. Hdw. Co.	Hardware	2355	9 95
	Erner & Hopkins.....	"	2356	25 40
	Cent. O. Paper Co.....	Paper	2357	22 41
	James P. Carlisle.....	Sand, cement, etc.....	2358	8 90
	Tallmadge Hdw. Co....	Hardware	2359	23 04
	Columbus Supply Co...	Supplies	2360	15 90
	Blackwood, Green & Co.	Metal and labor.....	2361	11 72
	Robert A. McClure.....	Table frames, etc.....	2362	206 02
	Amer. Dist. Tel. Co....	Messenger, etc.....	2363	1 25
	W. S. Orvis.....	Paper and ink.....	2364	1 40
	H. Braun Sons & Co...	Instruments	2365	7 75
	Columbus Bolt Works..	Bolts	2366	80
	J. S. Abbott & Co.....	Hardware	2367	4 15
	Hall-Collins Hdw. Co..	Files and sandpaper.....	2368	6 63
	Elec. Sup. & Const. Co.	Electrical supplies	2369	13 28
	Miller Fur. Co.....	Special box	2370	15 00
	Champlin Printing Co..	Printing	2371	35 50
	Spahr & Glenn.....	"	2372	7 25
	Standard Oil Co.....	Oil	2373	34 73
	Col. M. & M. Sup. Co..	Supplies	2374	41 40
	Domestic Laundry	Laundry work	2375	21 83
	Capital City Mach. Co..	Iron and castings.....	2376	27 78
	J. S. Maclean.....	Rifle molds	2377	93 75
	E. C. Karshner.....	Postal guide	2378	2 50
	Hann & Adair.....	P. O. cards	2379	2 75
	Western Union Tel. Co.	Telegrams	2380	4 89
	Nitschke Bros	Printing	2381	9 40
	Col. Transfer Co.....	Carriage service	2382	5 00
	J. F. Ridenour.....	Half dozen files.....	2383	1 25
	Eaton Mach. Works....	Lock and hasps	2384	15 18
	Central Union Tel. Co..	Rent and tolls	2385	12 96
	Wm. Taylor M. & G. Co.	Mantel cabinets	2386	75 00
	Batterson Dec. House..	Papering	2387	8 20
	McAllister, Moh. & Co.	Desk	2388	18 00
	Fish Press Brick Co....	Brick	2389	13 00
	New Col. Bridge Co....	Plate and drayage.....	2390	3 06
	Cherington P. & E. Co..	Stamps	2391	1 55
	P. C. Cull.....	Mason work	2392	6 75
	Kimball & Matthews....	One dozen plates.....	2393	56
	Hart & Crouse.....	Shaker bar and labor...	2394	2 06
	J. & G. Butler.....	Soap and candles.....	2395	24 82
	L. A. Harsh & Co.....	Springs and wringer....	2396	1 50
	Wassall F. C. Co.....	Cement	2397	5 70
	Ruggles-Gale Co	Record	2398	1 25
	J. J. Smith & Co.....	Stamp and pad.....	2399	1 35
	Col. Pharmacal Co.....	Rubber tubing	2400	15
	Jeffrey Mfg. Co.....	Chain	2401	8 00
	J. M. & W. Westwater..	Wire shades, etc.....	2402	3 40
	Lewis Fink	Picture rail	2403	2 60
	Lawrence Press Co.....	Labels	2404	3 00
	Seraphim Blank B. Co..	Binding	2405	145 15
	Col. Gas Co.....	February gas	2406	161 75
	J. A. Beer.....	Laboratory work	2407	2 10
	W. H. Waters.....	Labor	2408	42 00
	Forest Spencer	Wheeling coal	2409	9 00
	F. W. Arnold.....	Student assistance	2410	4 94
	O. I. Dick.....	Labor	2411	8 50
	M. C. Hunter.....	"	2412	9 00
	J. G. Sterling.....	"	2413	4 25

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 7	B. B. Wells	Labor	2414	$8 88
	Melvin Dresbach	Dept. supplies	2415	5 75
	Spahr & Glenn	Envelopes	2416	2 25
	J. W. Shaw	Work in library	2417	8 95
	Mabel Huddleson	Labor	2418	10 00
	S. N. Young	Work	2419	9 10
	Mason Snow	Labor in library	2420	8 95
	Roy Thompson	Guide	2421	5 00
	F. C. McKinney	"	2422	3 63
	F. C. Long	"	2423	6 25
	Helen Powell	Clerical services	2424	3 15
	K. H. Duncan	Street car tickets	2425	5 00
	Grace Eagleson	Clerical services	2426	4 47
	E. L. Orndorf	Guide	2427	5 38
	Andrew Spittal	Labor	2428	21 21
	W. L. Redrow	"	2429	17 70
	R. W. Funk	Work in store room	2430	16 42
	Phil. Long	Luncheon	2431	7 50
	E. G. Bailey	Labor	2432	6 10
	T. A. Panter	Masonry	2433	2 10
	Metta Seymour	Clerical work	2434	6 00
	Edith Seymour	Piano playing	2435	3 00
	Helen Potts	"	2436	6 25
	H. C. Price	Photographs	2437	2 75
	Richard Spencer	Wheeling coal	2438	42 00
	C. L. Sackett	Lantern, extra copies	2439	8 00
	H. J. Hammond	Hospital supplies	2440	3 00
	J. Stainbrook	Work in boiler house	2441	9 00
	Wilbert Morelan	Carpentry	2442	14 25
	J. H. Randall	"	2443	34 50
	E. J. Barton	"	2444	13 75
	A. F. Wilcox	"	2445	16 38
	H. O. Carrington	Lantern	2446	26 67
	A. H. Barber Mfg. Co.	Castings	2447	9 00
	Chic. Blue Pr. Paper Co.	Blueprint paper	2448	4 80
	Baker & Adamson C. Co.	Chemicals, etc.	2449	36 65
	Eimer & Amend	"	2450	13 40
	Emil Greiner	Apparatus	2451	29 53
	Chic. Laboratory S. Co.	Supplies	2452	14 18
	Akron Chemical Co.	Bisque ware	2453	2 00
	Amer. Aristotype Co.	Paper	2454	9 75
	Bausch & Lomb Opt. Co.	Apparatus	2455	7 35
	Open Court Pub. Co.	Portraits	2456	12 00
	Elec. Appliance Co.	Conduit and clips	2457	6 08
	Babcock & Wilcox Co.	Worm and wheel	2458	18 65
	M. P. Streett	Masonry and material	2459	22 00
	M. R. Shellenberger	Advertisement	2460	1 50
	Jas. McCrea & Co.	Steam clamp	2461	9 75
	Fairbanks, Morse & Co.	Standard sand	2462	10 50
	Riehle Bros. & Co.	Molds and sieve	2463	47 50
	W. H. Anderson & Co.	Reports	2464	15 00
	C. Scribner's Sons	Commercial Cuba	2465	3 27
	R. B. Hough	Specimen pages	2466	9 76
	H. O. Carrington	Normal lantern	2467	26 67
	D'Este & Seely Co.	Trap	2468	4 00
	M. P. Streett	Material and labor	2469	4 00
	Henry Barnard	Journal of Education	2470	120 00
	Burrows Bros. & Co.	Books	2471	94 26
	Boston Test. Lab.	Subscription	2472	3 00
	Am. Inst. Elec. Engrs.	Reports	2473	6 00
	Boston Book Co.	Books	2474	83 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 7	Robt. I. Fulton	Desks	2475	$10 00
	G. E. Stechert	Books	2476	944 07
	Ohio Nat. Bank	Foreign money order	2477	11 95
	R. M. Rownd, P. M.	Dep. for 2nd class mat.	2478	10 00
	J. N. Bradford	Lettering commissions	2479	14 25
	Webb Sta. & Ptg. Co.	Office supplies	2480	11 00
	Chic. Lab. Sup. & S. Co.	Supplies	2481	5 75
	Osborne, Will's. & Horn	Coal	2482	59 16
	J. T. Godfrey	Trustee expense	2483	20 11
	John W. Beech	Salary	2484	60 00
	Lily Weeks	Janitress	2485	5 00
	Postal Tel. Cable Co.	Telegrams	2486	66
	D. A. Crowner	Salary March, 1900	2487	33 34
	Elisha Smith	" "	2488	33 34
	Lily Weeks	Services, March, 1900	2489	5 00
	T. F. Hunt	Salary March, 1900	2490	250 00
	Wm. D. Gibbs	" "	2491	160 00
	J. W. Decker	" "	2492	140 00
	Frank Ruhlen	" "	2493	60 00
	H. A. Weber	" "	2494	225 00
	A. E. Vinson	" "	2495	80 00
	G. W. Knight	" "	2496	250 00
	John B. Sanborn	" "	2497	70 00
	A. M. Bleile	" "	2498	225 00
	C. B. Morrey	" "	2499	100 00
	M. Dresbach	" "	2500	30 00
	H. C. Lord	" "	2501	160 00
	W. A. Kellerman	" "	2502	225 00
	J. H. Schaffner	" "	2503	100 00
	S. W. Collett	" "	2504	25 00
	Alice Dufour	" "	2505	25 00
	F. K. Luke	" "	2506	50 00
31	Wm. McPherson	" "	2507	225 00
	S. A. Norton	" "	2508	120 00
	W. E. Henderson	" "	2509	100 00
	D. A. Kohr	" "	2510	60 00
	H. C. Gore	" "	2511	30 00
	J. F. Jeffrey	" "	2512	10 00
	C. N. Brown	" "	2513	225 00
	C. E. Sherman	" "	2514	110 00
	J. W. Groves	" "	2515	50 00
	Ed. Orton	" "	2516	180 00
	A. V. Bleininger	" "	2517	40 00
	Wm. Cannan	" "	2518	20 00
	P. G. Bowman	" "	2519	140 00
	C. P. Souther	" "	2520	80 00
	J. N. Bradford	" "	2521	180 00
	T. E. French	" "	2522	110 00
	T. K. Lewis	" "	2523	60 00
	J. H. Vosskuehler	" "	2524	30 00
	Silas Martin	" "	2525	50 00
	F. C. Clark	" "	2526	160 00
	W. E. Mann	" "	2527	25 00
	Grace Pitts	" "	2528	30 00
	J. P. Gordy	" "	2529	225 00
	F. C. Caldwell	" "	2530	160 00
	F. A. Fish	" "	2531	60 00
	J. P. Covan	" "	2532	70 00
	A. C. Barrows	" "	2533	225 00
	J. R. Taylor	" "	2534	110 00
	W. H. Siebert	" "	2535	135 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 31	J. A. Bownocker	Salary March, 1900	2536	$100 00
	C. S. Prosser	" "	2537	150 00
	W. C. Mills	" "	2538	35 00
	E. A. Eggers	" "	2539	225 00
	C. W. Mesloh	" "	2540	110 00
	E. H. Moore	" "	2541	20 00
	J. R. Smith	" "	2542	225 00
	A. W. Hodgman	" "	2543	110 00
	W. R. Lazenby	" "	2544	225 00
	H. C. Price	" "	2545	50 00
	F. E. Sanborn	" "	2546	200 00
	W. A. Knight	" "	2547	100 00
	C. W. Crowe	" "	2548	80 00
	W. H. Renck	" "	2549	85 00
	A. H. McIntire	" "	2550	30 00
	S. C. Derby	" "	2551	225 00
	W. F. Hunter	" "	2552	250 00
	J. H. Collins	" "	2553	20 00
	J. A. Shauck	" "	2554	17 50
	E. B. Kinkead	" "	2555	120 00
	W. H. Page	" "	2556	140 00
	E. O. Randall	" "	2557	70 00
	D. F. Pugh	" "	2558	95 00
	O. B. Jones	" "	2559	135 00
	H. N. Townshend	" "	2560	55 00
	Gertrude Kellicott	" "	2561	55 00
	Maude D. Jeffrey	" "	2562	55 00
	Lucy Allen	" "	2563	55 00
	C. B. Guittard	" "	2564	55 00
	R. D. Bohannon	" "	2565	225 00
	G. W. McCoard	" "	2566	160 00
	C. L. Arnold	" "	2567	100 00
	K. D. Swartzel	" "	2568	100 00
	E. L. Ball	" "	2569	30 00
	J. W. Young	" "	2570	30 00
	C. L. E. Moore	" "	2571	10 00
	W. T. Magruder	" "	2572	225 00
	E. A. Hitchcock	" "	2573	150 00
	F. J. Hale	" "	2574	30 00
	C. A. Grate	" "	2575	30 00
	A. F. Hall	" "	2576	60 00
	F. A. Ray	" "	2577	200 00
	N. W. Lord	" "	2578	200 00
	E. E. Somermeier	" "	2579	70 00
	G. B. Kauffman	" "	2580	200 00
	W. A. Landacre	" "	2581	70 00
	E. E. Harrold	" "	2582	90 00
	N. P. Oglesby	" "	2583	40 00
	W. H. Scott	" "	2584	225 00
	F. M. Hamilton	" "	2585	80 00
	C. P. Linhart	" "	2586	160 00
	S. E. Canfield	" "	2587	75 00
	D. C. Huddleson	" "	2588	50 00
	B. F. Thomas	" "	2589	225 00
	J. E. Boyd	" "	2590	120 00
	F. E. Kester	" "	2591	80 00
	H. W. Brown	" "	2592	25 00
	J. V. Denney	" "	2593	225 00
	W. L. Graves	" "	2594	100 00
	Geo. H. McKnight	" "	2595	90 00
	H. C. Allen	" "	2596	115 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
Mar. 31	J. B. Parker	Salary March, 1900	2597	$30 00
	B. L. Bowen	" "	2598	225 00
	C. A. Bruce	" "	2599	100 00
	C. F. Dowd	" "	2600	20 00
	D. S. White	" "	2601	160 00
	W. F. Lavery	" "	2602	70 00
	C. B. Frederick	" "	2603	70 00
	O. V. Brumley	" "	2604	50 00
	H. M. Osborn	" "	2605	225 00
	J. S. Hine	" "	2606	85 00
	F. L. Landacre	" "	2607	85 00
	W. O. Thompson	" "	2608	416 67
	Alexis Cope	" "	2609	187 50
	Carl E. Steeb	" "	2610	60 00
	E. D. Cockins	" "	2611	58 33
	E. R. Hubler	" "	2612	33 33
	K. H. Duncan	" "	2613	54 17
	W. C. McCracken	" "	2614	150 00
	C. M. Low	" "	2615	54 17
	W. A. Standley	" "	2616	50 00
	Benj. LeBay	" "	2617	50 00
	T. A. Boude	" "	2618	45 00
	W. H. Case	" "	2619	45 00
	Marion Peck	" "	2620	40 00
	Geo. R. Rose	" "	2621	65 00
	J. Garrettson	" "	2622	37 39
	Benj. Irwin	" "	2623	45 00
	J. C. Perry	" "	2624	12 50
	G. A. Goodspeed	" "	2625	40 00
	R. E. McIntosh	" "	2626	12 50
	D. D. Geren	" "	2627	40 00
	T. E. Osborn	" "	2628	40 00
	J. H. Brown	" "	2629	40 00
	Wm. Whitestine	" "	2630	40 00
	G. C. Denny	" "	2631	40 00
	E. G. Bailey	" "	2632	15 00
	A. G. McCall	" "	2633	27 00
	M. N. Cook	" "	2634	40 00
	W. Conklin	" "	2635	40 00
	H. Chantler	" "	2636	40 00
	Arthur Chantler	" "	2637	45 00
	Earl Conway	" "	2638	20 00
	James Kelly	" "	2639	25 00
	W. C. Weir	" "	2640	20 00
	W. Townsel	" "	2641	25 00
	C. H. Woodruff	" "	2642	65 00
23	R. M. Cooper	Return fees	2643	10 00
27	Lily Weeks	Salary one week	2644	5 00
30	M. J. Kellenberger	Services	2645	20 00
April 4	O. I. Dick	Student labor	2646	7 03
	A. F. Wilcox	Carpenter work	2647	25 25
	F. C. McKinney	Guide, etc	2648	4 17
	J. H. Randall	Carpenter work	2649	56 00
	W. Morelan	"	2650	18 25
	Andrew Spittal	Departmental work	2651	29 49
	H. C. Price	Express and postage	2652	5 00
	B. B. Wells	Student labor	2653	6 50
	F. W. Arnold	"	2654	1 35
	A. H. Lyon	"	2655	4 05
	T. A. Panter	Janitor work	2656	6 53
	M. C. Hunter	"	2657	6 90

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
April 4	Hattie Hoffman	Work in library	2658	$4 00
	Mason Snow	"	2659	9 95
	Mabel Huddleson	"	2660	10 00
	S. N. Young	"	2661	10 60
	J. W. Shaw	"	2662	10 30
	Gretchen Miller	"	2663	4 50
	West. Union Tel. Co.	Telegrams	2664	95
	Grace Young	Work in library	2665	4 00
	Max Morse	History of England	2666	8 00
	R. R. Harkins	Drafting	2667	90
	E. G. Bailey	Labor	2668	9 68
	M. W. Mumma	"	2669	1 25
	E. E. Nobles	Drafting	2670	11 00
	C. P. Linhart	Department supplies	2671	3 00
	C. B. Frederick	Anatomy horses	2672	10 50
	F. R. Kunkle	Work in laboratory	2673	5 25
	F. C. Clark	Department supplies	2674	1 88
	Arthur Geren	Drawing paper	2675	46 85
	E. L. Orndorf	Guide	2676	4 12
	W. A. Hite	"	2677	5 38
	A. McLaughlin	Clerical work	2678	1 35
	Helen Powell	"	2679	1 35
	Grace Eagleson	"	2680	2 40
	F. C. Long	Guide	2681	3 50
	Roy Thompson	"	2682	6 87
	R. M. Starbuck	Plumbing charts	2683	3 00
	J. R. Smith	Expressage	2684	1 85
	E. D. West	Roman coins	2685	2 00
	W. L. Redrow	Lab. asst	2686	15 35
	C. P. Linville	"	2687	5 00
	C. L. Sackett	Adv. in Lantern	2688	58 67
	R. W. Funk	Work in store room	2689	22 50
	Jacob Slyh	Labor	2690	4 50
	Gustav Bruder	Band instruction	2691	20 00
	J. A. Beer	Lab. asst	2692	3 10
	J. S. Hine	Lab. supplies & expen's	2693	14 85
	J. C. Perry	Campus work	2694	3 90
	Warren Severn	"	2695	2 80
	J. N. Bradford	Drawing materials	2696	1 50
	R. E. McIntosh	Wiring, etc	2697	3 25
	H. B. Kinnear	Wiring	2698	12 15
	Richard Spencer	Wheeling coal	2699	42 00
	W. H. Watters	"	2700	36 00
	C. H. Woodruff	Muslin and hooks	2701	86
	Standard Oil Co	Oil and gasoline	2702	54 76
	Erner & Hopkins	Electrical supplies	2703	14 31
	Spahr & Glenn	Printing	2704	32 00
	J. S. Abbott & Co	Hardware	2705	3 55
	Hann & Adair	Printing	2706	9 50
	Kauffman, Lattimer Co.	Drugs and sundries	2707	132 56
	J. S. Maclean	Case, brackets, etc	2708	20 50
	Tallmadge Hdw. Co.	Hardware	2709	54 03
	Schoedinger, F'rn & Co.	"	2710	30 23
	Kelton & Converse	Lumber	2711	67 97
	Col. Mill & Mine S. Co.	Waste and lamps	2718	28 33
	Harper Illustrating Co.	Half tone work	2713	11 85
	Domestic Laundry	Towel service	2714	23 72
	Penna. Fuel Co	Coal	2715	21 50
	Champlin Printing Co.	Printing	2716	234 55
	Franklin Toil. Sup. Co.	Towel service	2717	4 80
	E. Doddington & Co.	Lumber, etc	2718	51 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
April 4	Col. Supply Co.	Supplies	2719	$27 57
	R. A. McClure.	Lumber	2720	87 95
	Bucher Eng. Co.	Half tone, etc.	2721	22 78
	L. B. Wing.	Trustee expenses	2722	13 50
	J. W. Beach.	Salary for March	2723	60 00
	Wm. Cannan	Store room supplies	2724	15 50
	Murray City Coal Co.	Coal	2725	722 00
	Nitschke Bros	Printing	2726	9 60
	Kimball & Mathews.	Supplies	2727	1 00
	Cap. City Mchn. Wks.	Steel rods, etc.	2728	9 26
	J. M. & W. Westwater.	Chandeliers, etc.	2729	109 25
	Payne-McD. Hdw. Co.	Hardware	2730	13 40
	McClelland & Co.	Supplies	2731	3 98
	E. E. Corwin.	Claim of Col. Seed Co.	2732	43 75
	Jeffrey Mfg. Co.	Red rope ins. paper	2733	3 50
	Walter L. Lillie & Co.	Merchandise and frames	2734	4 00
	Logan McCormick	Frames	2735	6 00
	The H. Cole Co.	Thumb tacks	2736	3 00
	Seraphim B. B. Co.	Binding	2737	58 05
	H. H. Walling.	Painting and scraping	2738	18 15
	Eldridge & Higgins Co.	Jars	2739	5 25
	Moonstone Copy. Sl. Co.	Filling and ink	2740	1 45
	P. Hayden S. & Hd. Co.	Cube castings	2741	6 79
	Col. Gas Co.	Coke	2742	6 65
	James P. Carlisle.	Plaster and cement	2743	5 10
	H. W. Johns Mfg. Co.	One gallon No. 56 paint.	2744	1 50
	Burgess Sold. Furn. Co.	Repairing	2745	3 30
	Palmer & Beck.	Tin	2746	3 00
	H. Braun Sons & Co.	Plumbago	2747	80
	Lynas Bros	Candles	2748	2 70
	Eaton Machine Works.	Iron pieces, etc.	2749	4 81
	Lewis Fink	Picture rail	2750	1 80
	Andrew Dobbie	Cotton	2751	2 40
	D. H. Derflinger.	Gasoline	2752	7 00
	Z. L. White & Co.	Dry goods	2753	3 48
	Dunn, Taft & Co.	Muslin, etc.	2754	1 36
	Scioto Boiler Works.	Boiler tube, etc.	2755	7 00
	Eimer & Amend.	Chemicals, etc.	2756	28 60
	Amer. Dist. Tel. Co.	Box rent	2757	26 00
	Webb Sta. & Ptg. Co.	Office supplies	2758	22 00
	Burrows Bros. Co.	Books	2759	91 84
	G. E. Stechert.	"	2760	234 04
	Henry Troemner	Riders	2761	1 92
	Baker & Adamson Co.	Chemicals	2762	14 84
	J. Carbutt	Plates	2763	124 24
	Chic. Lab. Sup. & S. Co.	Apparatus	2764	32 40
	E. H. Sargent & Co.	Machine lead, etc.	2765	51 00
	W. W. Whiton.	Eight bush. potatoes	2766	8 00
	U. S. Elec. Supply Co.	Telegraph receiver	2767	26 00
	Gregory Elec. Co.	Water meter	2768	15 15
	Nicholson File Co.	Files	2769	22 73
	The Strelinger Co.	Hutler dado head	2770	10 80
	G. H. Kearney.	Journals	2771	62 50
	The Boston Book Co.	Books	2772	103 00
	Boston Book Bind. Co.	Binder	2773	1 15
	H. H. Ballard.	Klips	2774	3 12
	T. C. Trueblood.	N. A. E. reports	2775	2 00
	Torrey Bot. Club.	Memoirs, Vol. 6 and 7	2776	6 00
	E. L. Field.	Cards	2777	20 70
	R. R. Bowker.	Catalogues	2778	5 00
	E. M. Knowles.	Stilts and pins	2779	75

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
pril 4	W. & L. E. Gurley....	Sketching case.....	2780	$38 00
	Edward Thompson Co..	Encyclopedia	2781	6 00
	W. H. Anderson & Co..	Reports, law	2782	7 00
	W. H. Johns Mfg. Co..	Half gallon paint.....	2783	1 50
	The Gunton Co.....	Magazine, etc.....	2784	11 20
	J. R. Palmenberg's Sons.	Display fixtures, etc....	2785	18 60
	Rand, McNally & Co...	Keeps Ancient Greece...	2786	8 80
	P. P. Caproni & Bro...	Busts	2787	11 05
	C. H. Evans & Co.....	Advertisement	2788	5 00
	W. J. Holland.....	Butterfly book	2789	3 00
	A. E. Adair.....	Mason work	2790	4 05
	Lily Weeks	Janitress	2791	5 00
	H. J. McTeague.....	Estimate, etc	2792	520 25
	Col. Gas Co.....	March gas	2793	160 20
	Eimer & Amend.....	Hydrometer, etc.....	2794	6 31
16	Adams-Bagnall Elec. Co.	Outer globes	2795	6 00
	F. H. McAllister	Plain sildes	2796	5 20
	Herman Haerlein	Services	2797	29 20
	Col. Water Works.....	Water rents	2798	797 11
	Bucher Eng Co.....	Half tone work.....	2799	3 00
	J. S. Abbott & Co.....	Locks and bolts	2800	2 42
	Lily Weeks	Janitress work	2801	5 00
	R. M. Rownd, P. M....	400 4c stamps	2802	16 00
	R. M. Rownd, P. M....	Postage stamps	2803	19 50
28	Thos. F. Hunt.....	Salary, April, 1900....	2804	250 00
	W. D. Gibbs.....	" "	2805	160 00
	J. W. Decker.....	" "	2806	140 00
	Frank Ruhlen	" "	2807	60 00
	H. A. Weber.....	" "	2808	225 00
	A. E. Vinson.....	" "	2809	80 00
	G. W. Knight.....	" "	2810	250 00
	J. B. Sanborn.....	" "	2811	70 00
	A. M. Bleile.....	" "	2812	225 00
	C. B. Morrey.....	" "	2813	100 00
	M. Dresbach	" "	2814	30 00
	H. C. Lord.....	" "	2815	160 00
	W. A. Kellerman.....	" "	2816	225 00
	J. H. Schaffner.....	" "	2817	100 00
	S. W. Collett.....	" "	2818	25 00
	Alice Dufour	" "	2819	25 00
	F. K. Luke.....	" "	2820	50 00
	Wm. McPherson	" "	2821	225 00
	S. A. Norton.....	" "	2822	120 00
	W. E. Henderson.....	" "	2823	100 00
	D. A. Kohr.....	" "	2824	60 00
	H. C. Gore.....	" "	2825	30 00
	J. F. Jeffrey.....	" "	2826	10 00
	C. N. Brown.....	" "	2827	225 00
	C. E. Sherman.....	" "	2828	110 00
une 16	F. K. Luke.....	Salary, June. 1900.....	2829	50 00
April 28	Edward Orton, Jr.....	Salary, April, 1900....	2830	180 00
	A. V. Bleininger.....	" "	2831	40 00
	Perla G. Bowman.....	" "	2832	140 00
	C. P. Souther.....	" "	2833	80 00
	J. N. Bradford.....	" "	2834	180 00
	T. E. French.....	" "	2835	110 00
	T. K. Lewis.....	" "	2836	60 00
	J. H. Vosskuehler.....	" "	2837	30 00
	Silas Martin	" "	2838	50 00
	F. C. Clark.....	" "	2839	160 00
	Grace Pitts.....	" "	2840	30 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
April 28	J. P. Gordy	Salary, April, 1900	2841	$225 00
	F. C. Caldwell	" "	2842	160 00
	F. A. Fish	" "	2843	60 00
	J. P. Covan	" "	2844	70 00
	A. C. Barrows	" "	2845	225 00
	J. R. Taylor	" "	2846	110 00
	W. H. Siebert	" "	2847	135 00
	J. A. Bownocker	" "	2848	100 00
	C. S. Prosser	" "	2849	150 00
	W. C. Mills	" "	2850	35 00
	E. A. Eggers	" "	2851	225 00
	C. W. Mesloh	" "	2852	110 00
	E. H. Moore	" "	2853	20 00
	J. R. Smith	" "	2854	225 00
	A. W. Hodgman	" "	2855	110 00
	W. R. Lazenby	" "	2856	225 00
	H. C. Price	" "	2857	50 00
	F. E. Sanborn	" "	2858	200 00
	W. A. Knight	" "	2859	100 00
	C. P. Crowe	" "	2860	80 00
	W. H. Renck	" "	2861	85 00
	A. H. McIntire	" "	2862	30 00
	S. C. Derby	" "	2863	225 00
	J. W. Beach	" "	2864	60 00
	W. F. Hunter	" "	2865	250 00
	J. H. Collins	" "	2866	20 00
	J. A. Shauck	" "	2867	17 50
	E. B. Kinkead	" "	2868	120 00
	W. H. Page	" "	2869	140 00
	E. O. Randall	" "	2870	70 00
	D. F. Pugh	" "	2871	95 00
	O. B. Jones	" "	2872	135 00
	H. N. Townshend	" "	2873	55 00
	Gertrude Kellicott	" "	2874	55 00
	Maude Jeffrey	" "	2875	55 00
	Lucy Allen	" "	2876	55 00
	C. B. Guittard	" "	2877	55 00
	R. D. Bohannon	" "	2878	225 00
	G. W. McCoard	" "	2879	160 00
	C. L. Arnold	" "	2880	100 00
	K. D. Swartzel	" "	2881	100 00
	E. L. Ball	" "	2882	30 00
	J. W. Young	" "	2883	30 00
	C. L. E. Moore	" "	2884	10 00
	W. T. Magruder	" "	2885	225 00
	E. A. Hitchcock	" "	2886	150 00
	F. J. Hale	" "	2887	30 00
	C. A. Grate	" "	2888	30 00
	A. F. Hall	" "	2889	60 00
	F. A. Ray	" "	2890	200 00
	N. W. Lord	" "	2891	200 00
	E. E. Somermeier	" "	2892	70 00
	G. B. Kauffman	" "	2893	200 00
	W. A. Landacre	" "	2894	70 00
	E. E. Harrold	" "	2895	90 00
	N. P. Oglesby	" "	2896	40 00
	W. H. Scott	" "	2897	225 00
	F. M. Hamilton	" "	2898	80 00
	C. P. Linhart	" "	2899	160 00
	S. E. Canfield	" "	2900	75 00
	D. C. Huddleson	" "	2901	50 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
April 28	B. F. Thomas	Salary, April, 1900	2902	$225 00
	J. E. Boyd	" "	2903	120 00
	F. E. Kester	" "	2904	80 00
	H. W. Brown	" "	2905	25 00
	J. V. Denny	" "	2906	225 00
	W. L. Graves	" "	2907	100 00
	G. H. McKnight	" "	2908	90 00
	H. C. Allen	" "	2909	115 00
	J. B. Parker	" "	2910	30 00
	B. L. Bowen	" "	2911	225 00
	C. A. Bruce	" "	2912	100 00
	C. F. Dowd	" "	2913	20 00
	D. S. White	" "	2914	160 00
	W. F. Lavery	" "	2915	70 00
	C. B. Frederick	" "	2916	70 00
	O. V. Brumley	" "	2917	50 00
	Herbert Osborn	" "	2918	225 00
	J. S. Hine	" "	2919	85 00
	F. L. Landacre	" "	2920	85 00
	W. O. Thompson	" "	2921	416 67
	Alexis Cope	" "	2922	187 50
	Carl E. Steeb	" "	2923	60 00
	E. D. Cockins	" "	2924	58 33
	E. R. Hubler	" "	2925	33 33
	K. H. Duncan	" "	2926	54 17
	W. C. McCracken	" "	2927	150 00
	C. W. Low	" "	2928	54 17
	W. A. Standley	" "	2929	50 00
	B. LeBay	" "	2930	50 00
	T. Boude	" "	2931	45 00
	W. H. Case	" "	2932	45 00
	Marion Peck	" "	2933	40 00
	G. R. Rose	" "	2934	65 00
	Jos. Garrettson	" "	2935	37 39
	B. Irwin	" "	2936	45 00
	J. C. Perry	" "	2937	12 50
	G. A. Goodspeed	" "	2938	40 00
	R. E. McIntosh	" "	2939	12 50
	D. D. Geren	" "	2940	40 00
	T. E. Osborn	" "	2941	40 00
	Wm. Whitestine	" "	2942	40 00
	G. C. Denney	" "	2943	40 00
	E. G. Bailey	" "	2944	15 00
	A. G. McCall	" "	2945	27 00
	M. N. Cook	" "	2946	40 00
	W. Conklin	" "	2947	40 00
	H. Chantler	" "	2948	40 00
	A. Chantler	" "	2949	45 00
	Earl Conway	" "	2950	20 00
	J. Kelley	" "	2951	25 00
	W. C. Weir	" "	2952	20 00
	W. Townsel	" "	2953	25 00
	J. H. Brown	" "	2954	15 00
	J. H. Brown	" "	2955	25 00
June 16	W. C. Weir	Salary June 1900	2956	20 00
April 28	W. E. Mann	Salary, April, 1900	2957	25 00
	C. H. Woodruff	" "	2958	65 00
20	A. Douglas, Admr	Settlement Kendrick case	2959	4,000 00
	N. W. Evans	Settlement Evans case	2960	753 04
	C. F. Galloway, clerk	Costs in Evans case	2961	246 96
23	Lily Weeks	Salary	2962	5 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
April 23	Nitschke Bros.	Letter heads	2963	$3 00
26	R. M. Rownd.	Stamps	2964	16 00
27	Mrs. M. J. Kellenberger	Salary	2965	25 00
May 1	Lily Weeks	Janitress	2966	5 00
	L. B. Wing	Expense as trustee	2967	6 00
	R. M. Rownd.	Postage deposit	2968	10 00
4	Chicago Lab. S. S. Co.	Instruments and supplies	2969	215 55
2	L. C. Ferrell	Public documents	2970	240 00
3	Bausch & Lomb Co.	Condenser	2971	1 09
	Crosby Steam Gauge Co.	Valve and springs	2972	8 58
	Eimer & Amend	Chemicals	2973	9 23
	G. E. Stechert	Books	2974	78 61
	Maher & Grosh Cut. Co.	Cutlery	2975	6 46
	Emil Greiner	Apparatus and tubes	2976	15 20
	E. H. Sargent & Co.	Supplies	2977	32 85
	J. Carbutt	Photo supplies	2978	1 48
	Gen. Electric Co.	Electrical appliances	2979	10 10
	Albaugh Nursery Co.	Trees	2980	19 00
	Open Court Pub. Co.	Portraits, etc	2981	12 00
	G. B. Carpenter Co.	Tents	2982	211 99
	Boston Book Co.	Books	2983	97 31
	W H. Anderson & Co.	Digests	2984	139 75
	Am. Inst. Elec. Eng.	Subscription	2985	5 00
	Am. Pharm. Assn.	Proceedings vol. 47	2986	5 50
	Am. Jour. of Physiology	Volume 15	2987	5 00
	Library Bureau	Library supplies	2988	16 57
	N. Y. Botanical Garden.	Journals, etc	2989	5 25
	H. E. Hooper	Century atlas	2990	11 50
	Burrows Bros. Co.	Books	2991	184 67
	E. A. Kinsey Co.	Slide	2992	3 00
	Thomas Mehan & Sons.	Trees	2993	109 95
	DeLaval Sep. Co.	Points and belts	2994	4 50
	Creamery Package Co.	Dairy supplies	2995	45 87
	Cornish, Curtis & G. Co.	Cheese molds	2996	5 00
	Wellington Box Co.	Boxes	2997	4 00
	D. H. Burrell & Co.	Nut for Hood gang pr'ss	2998	2 00
	Keuffel & Esser Co.	Mining target	2999	72 00
	Wm. Gartner & Co.	Spheromete , etc	3000	22 00
	Queen & Co.	Bridge and tubes	3001	124 05
	Babcock & Wilcox Co.	Boiler tubes	3002	34 10
	D. C. Heath & Co.	Books	3003	1 34
	J. G. Biddle	Instruments	3004	25 58
	Fidelity Int. Agency.	Miner's safety lamp	3005	4 40
	T. A. Randall & Co.	Vitrified paving brick	3006	1 00
	Christy Fire Clay Co.	Clay	3007	4 63
	U. S. Encaustic Tile Co.	Tiles	3008	13 79
	G. W. Carman	Membership N. C. A. C.	3009	3 00
	F. H. Newell	Lecture	3010	15 00
	India Alkali Works.	Savogran and oil soap.	3011	26 27
	C. W. Pomeroy	Stationery	3012	3 50
	Jos. E. Wing	Lecture expenses	3013	4 40
	Wilbert Morelan	Carpentry	3014	4 25
	Honline & West	Books	3015	36 30
	J. H. Randall	Carpentry	3016	46 00
	W. L. Redrow	Lab. assistance	3017	2 25
	O. S. Marckworth.	Laboratory work	3018	21 40
	H. C. Price	Department supplies	3019	7 50
	F. C. Clark	Drawing materials	3020	1 75
	S. W. Young	Library work	3021	9 65
	C. H. Woodruff	Piece iron	3022	15
	Mabel Huddleson	Library work	3023	10 50

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
May 3	Christ Trappe	One bay horse	3024	$100 00
	J. W. Shaw	Work in law library	3025	9 70
	Mason Snow	Work in law library	3026	9 90
	Thos. A. Panter,	Janitor	3027	10 58
	J. G. Sterling	Student labor	3028	1 31
	O. I. Dick	"	3029	2 93
	F. W. Arnold	Assistance	3030	8 55
	T. V. Stires	Work on campus	3031	1 75
	L. P. McAllister	"	3032	1 25
	A. E. Day	Student labor	3033	1 25
	Morris Bugby	Work on campus	3034	2 18
	Blain Galloway	"	3035	7 18
	J. C. Perry	"	3036	18 10
	John Frank	"	3037	4 50
	Edith Seymour	Piano, gym	3038	5 50
	Helen Potts	" "	3039	11 25
	E. G. Bailey	Department labor	3040	8 20
	F. J. Hale	"	3041	7 85
	M. L. Seymour	Clerical work	3042	3 00
	H. C. Nidy	Blue printing	3043	30
	E. A. Hitchcock	Cash advanced	3044	31 50
	Richard Spencer	Wheeling coal	3045	7 50
	Edward Orton, Jr	Cash advanced	3046	36 75
	G. W. Schubert	Guide	3047	2 38
	F. C. Long	"	3048	4 75
	E. L. Orndorf	"	3049	4 50
	Roy Thompson	"	3050	3 63
	Arthur Geren	Instruments	3051	9 09
	F. C. McKinney	Guide	3052	3 88
	Tallmadge Hdw. Co	Hardware	3053	21 40
	McClelland & Co	Office supplies	3054	5 80
	Schoedinger, F'rn & Co.	Hardware	3055	67 49
	Col. Supply Co	Supplies	3056	50 42
	Blackwood, Green & Co.	Pipe and hardware	3057	10 61
	Col. M. & M. Supply Co	Valves, etc	3058	54 78
	Kelton & Converse	Lumber	3059	21 57
	Hann & Adair	Envelopes, etc	3060	13 10
	Domestic Laundry	Washing towels	3061	22 72
	H. Braun Sons & Co.	Supplies	3062	13 23
	Troy Laundry Co	Washing curtains	3063	70
	Standard Oil Co	Renown engine oil	3064	9 45
	Tracy-Wells Co	Sundries	3065	27 90
	Hester Getz	Cardboard	3066	1 75
	Eva Tipton	Stenographic work	3067	2 80
	Osborn, Will's. & Horn	Coal	3068	32 72
	J. P. Carlisle	Plaster	3069	2 50
	Ohio State Journal Co.	Advertisement	3070	13 12
	Spahr & Glenn	Printing	3071	6 50
	Hanna Paint Mfg. Co.	White lead	3072	11 05
	Haydenville M. & M. Co.	Fire clay	3073	5 63
	F. O. Schoedinger	Can and faucet	3074	2 50
	Borger Bros	Cylinder	3075	4 50
	B. D. Potts	Pipe	3076	2 90
	Columbus Gas Co	Coke	3077	12 69
	Wm. Burdell, Jr	Hobbles, etc	3078	5 75
	E. C. Livenspire	"	3079	1 20
	Col. Wire & Iron Wks.	Partitions, etc	3080	15 00
	M. P. Streett	Brickwork	3081	500 00
	Brust & Bauch	Masonry	3082	85 00
	B. G. Kalb	Stenographic work	3083	3 00
	Blanche DeLong	" "	3084	1 87

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
May 2	Smith Bros. Hdw. Co..	Emery, etc.....	3085	$1 30
	F. J. Heer.....	Electros of map.....	3086	2 00
	G. Drobisch	Shrubs	3087	2 50
	Hall-Collins Hdw. Co...	LePages glue	3088	2 00
	I. H. Miller.....	Notarial work	3089	4 00
	James Penn	Hauling	3090	3 45
	Seraphim B. B. Co.....	Binding	3091	37 85
	Val Loewer	Range	3092	36 00
	The H. Cole Co.....	Drawing materials	3093	3 20
	Payne-McD. Hdw. Co..	Glass	3094	3 25
	Livingston Seed Co.....	Seeds	3095	1 60
	Erner & Hopkins.....	Wire	3096	1 65
	J. S. Abbott & Co.....	Hardware	3097	1 40
	Robert A. McClure.....	Table and lumber.....	3098	49 22
	Champlin Printing Co..	Printing	3099	75 25
	Hager & Graves.....	Groceries	3100	32 97
	The Alpha Dairy Co....	Milk tickets	3101	1 10
	Busy Bee C. K. Co.....	Supplies	3102	1 40
	Kimball & Mathews....	"	3103	6 55
	Kauffman-Lattimer Co..	Drugs and sundries....	3104	350 85
	P. Hayden Sad. Hd. Co.	Iron	3105	9 35
	Engelke & Bigelow.....	Freight and cartage.....	3106	72 35
	Columbus Gas Co.....	April gas	3107	169 80
	Engelke & Bigelow.....	Freight, etc.....	3108	27 20
	H. J. McTeague.....	Est. astron'rs. residence.	3109	465 85
	C. H. Davis.....	Two machines	3110	70 00
	R. M. Rownd, P. M....	Postage stamps	3111	15 00
	John T. Mack.....	Expenses as trustee....	3112	42 25
	Lily Weeks	Janitress	3113	5 00
	Bucher Engraving Co..	Half tone work.....	3114	31 25
	Bucher Engraving Co..	" "	3115	3 00
	J. McLain Smith.....	Trustee expenses	3116	22 90
	R. M. Rownd, P. M....	Deposit, pound postage	3117	10 00
	F. J. Tyler.....	Salary for April.....	3118	25 00
	Helen Powell.....	Clerical work	3119	2 00
	E. E. Nobles.....	Drafting	3120	12 50
	W. Townsel	Salary, May, 1900.....	3121	25 00
	W. C. Weir.....	" "	3122	20 00
	C. H. Woodruff.....	" "	3123	65 00
	W. E. Mann.....	" "	3124	25 00
	Earl Conway	Salary, June, 1900.....	3125	20 00
	James Kelley	Salary, May, 1900.....	3126	25 00
	Earl Conway	" "	3127	20 00
	A. Chantler	" "	3128	45 00
	H. Chantler	" "	3129	40 00
	M. N. Cook.....	" "	3130	40 00
	A. G. McCall.....	" "	3131	27 00
	E. G. Bailey.....	" "	3132	15 00
	G. C. Denny.....	" "	3133	40 00
	William Whitestine	" "	3134	40 00
	J. H. Brown.....	" "	3135	15 00
	J. H. Brown.....	" "	3136	25 00
	T. E. Osborn.....	" "	3737	40 00
	D. D. Geren.....	" "	3138	40 00
	R. E. McIntosh.....	" "	3139	12 50
	G. A. Goodspeed.....	" "	3140	40 00
	J. C. Perry.....	" "	3141	12 50
	Benj. Irwin	" "	3142	45 00
	J. R. Garrettson.....	" "	3143	37 39
26	Geo. R. Rose.....	" "	3144	65 00
	Marion Peck	" "	3145	40 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
May 26	W. H. Case	Salary, May, 1900	3146	$45 00
	T. M. Boude	" "	3147	45 00
	Benj. LeBay	" "	3148	50 00
	W. A. Standley	" "	3149	50 00
	Chas. M. Low	" "	3150	54 17
	W. C. McCracken	" "	3151	150 00
	K. H. Duncan	" "	3152	54 17
	E. R. Hubler	" "	3153	33 33
22	E. D. Cockins	" "	3154	58 33
	Carl E. Steeb	" "	3155	60 00
	Alexis Cope	" "	3156	187 50
26	W. O. Thompson	" "	3157	416 67
	F. L. Landacre	" "	3158	85 00
	J. S. Hine	" "	3159	85 00
	Herbert Osborn	" "	3160	225 00
	O. V. Brumley	" "	3161	50 00
	C. B. Frederick	" "	3162	70 00
	W. F. Lavery	" "	3163	70 00
	D. S. White	" "	3164	160 00
	Chas. F. Dowd	" "	3165	20 00
	C. A. Bruce	" "	3166	100 00
	B. L. Bowen	" "	3167	225 00
	J. B. Parker	" "	3168	30 00
	H. C. Allen	" "	3169	115 00
	G. H. McKnight	" "	3170	90 00
	W. L. Graves	" "	3171	100 00
	J. V. Denney	" "	3172	225 00
	H. W. Brown	" "	3173	25 00
	F. E. Kester	" "	3174	80 00
	J. E. Boyd	" "	3175	120 00
	B. F. Thomas	" "	3176	225 00
	D. C. Huddleson	" "	3177	50 00
	S. E. Canfield	" "	3178	75 00
	C. P. Linhart	" "	3179	160 00
	F. M. Hamilton	" "	3180	80 00
	W. H. Scott	" "	3181	225 00
	N. P. Oglesby	" "	3182	40 00
	E. E. Harrold	" "	3183	90 00
	W. A. Landacre	" "	3184	70 00
	G. B. Kauffman	" "	3185	200 00
	E. E. Somermeier	" "	3186	70 00
	N. W. Lord	" "	3187	200 00
	F. A. Ray	" "	3188	200 00
13	Lily Weeks	Janitress	3189	5 00
26	A. F. Hall	Salary, May, 1900	3190	60 00
	C. A. Grate	" "	3191	30 00
	F. J. Hale	" "	3192	30 00
	E. A. Hitchcock	" "	3193	150 00
	Wm. F. Magruder	" "	3194	225 00
	C. L. E. Moore	" "	3195	10 00
	J. W. Young	" "	3196	30 00
	E. L. Ball	" "	3197	30 00
	K. D. Swartzel	" "	3198	100 00
	C. L. Arnold	" "	3199	100 00
	G. W. McCoard	" "	3200	160 00
	R. D. Bohannon	" "	3201	225 00
	C. B. Guittard	" "	3202	55 00
	Lucy Allen	" "	3203	55 00
	Maude Jeffrey	" "	3204	55 00
	Gertrude Kellicott	" "	3205	55 00
	H. N. Townshend	" "	3206	55 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
May 26	O. B. Jones	Salary, May, 1900	3207	$135 00
	D. F. Pugh	" "	3208	95 00
	E. O. Randall	" "	3209	70 00
	W. H. Page	" "	3210	140 00
	E. B. Kinkead	" "	3211	120 00
	J. S. Shauck	" "	3212	17 50
	J. S. Collins	" "	3213	20 00
	W. F. Hunter	" "	3214	250 00
	J. W. Beach	" "	3215	60 00
	S. C. Derby	" "	3216	225 00
	A. H. McIntire	" "	3217	30 00
	W. H. Renck	" "	3218	85 00
	C. P. Crowe	" "	3219	80 00
	W. A. Knight	" "	3220	100 00
	F. E. Sanborn	" "	3221	200 00
	H. C. Price	" "	3222	50 00
	W. R. Lazenby	" "	3223	225 00
	A. W. Hodgman	" "	3224	100 00
	J. R. Smith	" "	3225	225 00
	E. H. Moore	" "	3226	20 00
	C. W. Mesloh	" "	3227	110 00
	E. A. Eggers	" "	3228	225 00
	W. C. Mills	" "	3229	35 00
	C. S. Prosser	" "	3230	150 00
	J. A. Bownocker	" "	3231	100 00
	W. H. Siebert	" "	3232	135 00
	J. R. Taylor	" "	3233	110 00
	A. C. Barrows	" "	3234	225 00
	J. P. Covan	" "	3235	70 00
	F. A. Fish	" "	3236	60 00
	F. C. Caldwell	" "	3237	160 00
	J. P. Gordy	" "	3238	225 00
	Grace Pitts	" "	3239	30 00
	F. C. Clark	" "	3240	160 00
	Silas Martin	" "	3241	50 00
	J. H. Vosskuehler	" "	3242	30 00
	T. K. Lewis	" "	3243	60 00
22	T. E. French	" "	3244	110 00
26	J. N. Bradford	" "	3245	180 00
	C. P. Souther	" "	3246	80 00
	Perla G. Bowman	" "	3247	140 00
	A. V. Bleininger	" "	3248	40 00
	Edw. Orton, Jr.	" "	3249	180 00
	C. E. Sherman	" "	3250	110 00
	C. N. Brown	" "	3251	225 00
	J. F. Jeffrey	" "	3252	10 00
	H. C. Gore	" "	3253	30 00
	D. A. Kohr	" "	3254	60 00
	W. E. Henderson	" "	3255	100 00
	S. A. Norton	" "	3256	120 00
	Wm. McPherson	" "	3257	225 00
	F. K. Luke	" "	3258	50 00
	Alice Dufour	" "	3259	25 00
	S. W. Collett	" "	3260	25 00
	J. H. Schaffner	" "	3261	100 00
	W. A. Kellerman	" "	3262	225 00
	H. C. Lord	" "	3263	160 00
	M. Dresbach	" "	3264	30 00
	C. B. Morrey	" "	3265	100 00
	A. M. Bleile	" "	3266	225 00
	J. B. Sanborn	" "	3267	70 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
May 26	G. W. Knight	Salary, May, 1900	3268	$250 00
	A. E. Vinson	" "	3269	80 00
	H. A. Weber	" "	3270	225 00
	Frank Ruhlen	" "	3271	60 00
	J. W. Decker	" "	3272	140 00
	Wm. D. Gibbs	" "	3273	160 00
	T. F. Hunt	" "	3274	250 00
	W. Conklin	" "	3275	40 00
	F. J. Tyler	" "	3276	25 00
21	N. P. Oglesby	Return fees	3277	6 00
	R. M. Rownd, P. M.	Pound postage deposit.	3278	10 00
	Lily Weeks	Janitress	3279	5 00
	U. S. Mort & Trust Co.	6 mo. int. on $100,000 4½% bonds, due June 1st, 1900	3280	2,250 00
June 1	Hayden-Clinton Nat. Bk.	6 mo. int. on $170,000 4½% bonds, due June 1, 1900	3281	3,825 00
	Hayden-Clinton Nat. Bk.	6 mo. int. on $60,000 6% bonds, due June 1, 1900	3282	1,800 00
	Hayden-Clinton Nat. Bk.	Redpn. of $10,000 cert's. No. 51–60, due June 1 1900	3283	10,000 00
May 23	B. S. Stephenson	Quartermaster service	3284	5 00
	Rollo S. Frame	Return fees	3285	15 00
28	U. S. Mort. & Trust Co.	Exchange on order 3280	3286	2 25
	Lily Weeks	Salary, one week	3287	4 00
	R. M. Rownd, P. M.	Pound postage	3288	10 00
June 1	R. M. Rownd	Stamps	3289	35 00
	M. J. Kellenberger	Services dom. economy.	3290	20 00
	Lily Weeks	Janitress	3291	3 00
	Nathaniel Reed	Guide	3292	2 07
4	R. M. Rownd, P. M.	Postal cards, etc.	3293	15 00
	G. H. McKnight	Salary, June, 1900	3294	90 00
16	T. F. Hunt	" "	3295	250 00
	W. D. Gibbs	" "	3296	160 00
	J. W. Decker	" "	3297	140 00
	Frank Ruhlen	" "	3298	60 00
	H. A. Weber	" "	3299	225 00
	A. E. Vinson	" "	3300	80
	G. W. Knight	" "	3301	250 00
5	J. B. Sanborn	" "	3302	70 00
16	A. M. Bleile	" "	3303	225 00
	C. B. Morrey	" "	3304	100 00
	M. Dresbach	" "	3305	30 00
	H. C. Lord	" "	3306	160 00
	W. A. Kellerman	" "	3307	225 00
	J. H. Schaffner	" "	3308	100 00
	S. W. Collett	" "	3309	25 00
	Alice Dufour	" "	3310	25 00
	W. McPherson	" "	3311	225 00
	S. A. Norton	" "	3312	120 00
	W. E. Henderson	" "	3313	100 00
	D. A. Kohr	" "	3314	60 00
	H. C. Gore	" "	3315	30 00
	J. F. Jeffrey	" "	3316	10 00
	C. N. Brown	" "	3317	225 00
	C. E. Sherman	" "	3318	110 00
	Edw. Orton, Jr.	" "	3319	180 00
	A. V. Bleininger	" "	3320	40 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
June 16	P. G. Bowman	Salary, June, 1900	3321	$140 00
	P. G. Souther	" "	3322	80 00
	J. N. Bradford	" "	3323	180 00
	T. E. French	" "	3324	110 00
	T. K. Lewis	" "	3325	60 00
9	J. H. Vosskuehler	" "	3326	30 00
	S. Martin	" "	3327	50 00
7	F. C. Clark	" "	3328	160 00
16	Grace Pitts	" "	3329	30 00
	J. P. Gordy	" "	3330	225 00
	F. C. Caldwell	" "	3331	160 00
	F. A. Fish	" "	3332	60 00
	J. P. Covan	" "	3333	70 00
13	A. C. Barrows	" "	3334	225 00
16	J. R. Taylor	" "	3335	110 00
	W. H. Siebert	" "	3336	135 00
14	J. A. Bownocker	" "	3337	100 00
16	C. S. Prosser	" "	3338	150 00
13	W. C. Mills	" "	3339	35 00
11	E. A. Eggers	" "	3340	225 00
14	E. H. Moore	" "	3341	20 00
16	C. W. Mesloh	" "	3342	110 00
	J. R. Smith	" "	3343	225 00
5	A. W. Hodgman	" "	3344	110 00
16	W. R. Lazenby	" "	3345	225 00
	H. C. Price	" "	3346	50 00
	F. E. Sanborn	" "	3347	200 00
	W. A. Knight	" "	3348	100 00
	C. P. Crowe	" "	3349	80 00
	W. H. Renck	" "	3350	85 00
9	A. H. McIntire	" "	3351	30 00
16	S. C. Derby	" "	3352	225 00
	J. W. Beach	" "	3353	60 00
13	W. F. Hunter	" "	3354	250 00
16	J. H. Collins	" "	3355	20 00
	J. H. Shauck	" "	3356	17 50
	E. B. Kinkead	" "	3357	120 00
	W. H. Page	" "	3358	140 00
	E. O. Randall	" "	3359	70 00
	D. F. Pugh	" "	3360	95 00
8	O. B. Jones	" "	3361	135 00
16	H. N. Townshend	" "	3362	55 00
	G. Kellicott	" "	3363	55 00
	Maude Jeffrey	" "	3364	55 00
9	Lucy Allen	" "	3365	55 00
16	C. B. Guittard	" "	3366	55 00
14	R. D. Bohannon	" "	3367	225 00
16	G. W. McCoard	" "	3368	160 00
	C. L. Arnold	" "	3369	100 00
	K. D. Swartzel	" "	3370	100 00
11	Emma Ball	" "	3371	30 00
16	J. W. Young	" "	3372	30 00
	C. L. E. Moore	" "	3373	10 00
	W. T. Magruder	" "	3374	225 00
13	E. A. Hitchcock	" "	3375	150 00
16	F. J. Hale	" "	3376	30 00
	Chas. A. Grate	" "	3377	30 00
	A. F. Hall	" "	3378	60 00
14	F. A. Ray	" "	3379	200 00
16	N. W. Lord	" "	3380	200 00
14	E. E. Somermeier	" "	3381	70 00

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
June 16	G. B. Kauffman	Salary, June, 1900	3382	$200 00
	W. A. Landacre	" "	3383	70 00
	E. E. Harrold	" "	3384	90 00
	N. P. Oglesby	" "	3385	40 00
	W. H. Scott	" "	3386	225 00
	F. M. Hamilton	" "	3387	80 00
	C. P. Linhart	" "	3388	160 00
	S. E. Canfield	" "	3389	75 00
	D. C. Huddleson	" "	3390	50 00
14	B. F. Thomas	" "	3391	225 00
16	J. E. Boyd	" "	3392	120 00
8	F. E. Kester	" "	3393	80 00
16	W. L. Graves	" "	3394	100 00
9	H. C. Allen	" "	3395	115 00
	J. B. Parker	" "	3396	30 00
5	H. W. Brown	" "	3397	25 00
14	J. V. Denney	" "	3398	225 00
	B. L. Bowen	" "	3399	225 00
16	C. A. Bruce	" "	3400	100 00
14	C. F. Dowd	" "	3401	20 00
16	D. S. White	" "	3402	160 00
14	W. F. Lavery	" "	3403	70 00
9	C. B. Frederick	" "	3404	70 00
14	O. V. Brumley	" "	3405	50 00
16	H. Osborn	" "	3406	225 00
9	J. S. Hine	" "	3407	85 00
13	F. L. Landacre	" "	3408	85 00
6	H. R. Marietta	Incidental fee	3409	15 00
	C. W. Schubert	Guide service	3410	6 88
	J. H. Randall	Carpentry work	3411	38 25
	W. Morlan	" "	3412	10 51
	J. C. Perry	Campus work	3413	14 40
	F. J. Pavlieck	Guide service	3414	5 50
	Arthur Geren	Drawing supplies	3415	4 68
9	H. J. Hammond	Department supplies	3416	1 32
6	W. C. Smith	Addressing envelopes	3417	1 65
	E. L. Orndorff	Guide services	3418	5 50
	H. L. Dowd	Addressing envelopes	3419	1 66
	C. E. Schumacher	Typewriting	3420	6 20
	S. E. Canfield	Department supplies	3421	2 55
	T. Rickey	Department labor	3422	10 00
	E. Seymour	Accompanying piano	3423	3 50
	H. Potts	Accompanying classes	3424	4 50
	M. Dresbach	Department supplies	3425	6 93
	F. C. Clark	" "	3426	1 05
	W. C. McCracken	Money advanced	3427	2 60
	C. L. Sackett, Mgr.	Adv. in Lantern	3428	58 34
	C. P. Souther	Department supplies	3429	3 00
	F. R. Kunkle	Labor	3430	15 15
	B. B. Wells	"	3431	5 35
	O. I. Dick	"	3432	4 50
	F. W. Arnold	"	3433	11 25
	T. A. Panter	"	3434	11 48
	C. P. Linville	Lab. assistance	3435	6 60
	W. McPherson	Department supplies	3436	1 96
	W. L. Redrow	Labor	3437	2 25
	Laura Hill	Clerical labor	3438	13 00
	Chas. R. Hall	Extra labor	3439	63
	E. G. Bailey	Labor on boilers	3440	13 13
	E. A. Hitchcock	Incidentals	3441	2 77
	J. A. Beer	Lab. assistance	3442	6 30

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
June 6	C. B. Frederick	Dept. supplies	3445	$39 25
	M. L. Seymour	Stenographic work	3443	7 35
	E. E. Nobles	Drafting	3444	1 75
	T. E. Osborne	Cleaning guns	3446	3 50
	T. E. French	Filling out commissions	3447	3 45
	G. Bruder	Band instruction	3448	68 00
	R. W. Funk	Labor in store room	3449	37 87
	A. V. Bleininger	Expenses	3450	4 70
	C. Albin	Guide service	3451	75
	R. F. Abbott	Band service	3452	15 00
	O. P. Cockerill	Expenses orat. contest	3453	21 00
	J. A. Bownocker	Exp. to high school	3454	12 05
	W. O. Thompson	Expenses legislature	3455	5 25
	F. C. Long	Guide service	3456	10 63
	K. H. Duncan	Street car tickets	3457	5 00
	F. C. McKinney	Guide service	3458	5 14
	R. Thompson	" "	3459	8 00
	Helen Powell	Clerical service	3460	1 28
	M. Matthews	Guide service	3461	50
	J. E. Loughrey	Guide service	3462	63
	M. Bugby	Guide and campus work	3463	4 20
	J. Frank	Guide service	3464	1 07
	J. F. Clevinger	Campus work	3465	1 82
	J. Frank	" "	3466	4 75
	F. E. Fleischer	" "	3467	20 62
	M. Snow	Work in library	3468	12 62
	M. Huddleson	" "	3469	13 00
	J. W. Shaw	Work in law library	3470	12 00
	S. N. Young	" "	3471	11 85
	Honline & West	Books	3472	9 47
16	Kauffman-Lattimer Co.	Drugs and sundries	3473	294 33
8	H. J. McTeague	Estimate No. 3 as res	3474	1,263 21
16	F. A. Stallman	Trunk hardware	3475	6 36
	Payne-McD. Hdw. Co.	Hardware	3476	32 10
	New Col. Bridge Co.	Beams and stirrups	3477	11 21
	Kimball & Matthews	Drawing supplies	3478	13 50
	Col. Plate & W. Glass	Glass	3479	9 40
	W. H. Miller Co.	Valve	3480	5 40
	Schilling Foundry Co.	Castings	3481	1 59
	H. Cole Co.	Tracing cloth	3482	6 46
	H. Goldsmith	Music	3483	17 80
	Wm. Burdell, Jr.	Top dressing	3484	2 50
	Perry Smythe	Framing	3485	2 25
	Warren Southw'k C. Co.	Repairing	3486	55 00
	Columbus Buggy Co.	Hickory kindling	3487	2 00
8	B. S. Stephenson	Quartermaster service	3488	10 00
	J. W. Smith	Course lec'res met'r'l'gy.	3489	100 00
	Columbu Gas Co.	May gas bill	3490	149 85
16	Buche Eng Co	Blocking cuts	3491	30
11	Eldridge & Higgins Co.	Mason jars	3492	2 59
16	Columbus Gas Co.	Coke	3493	13 74
	Penna. Fuel Co.	Coal	3494	8 25
	Engelke & Bigelow	Hauling to dumps	3495	90 00
	Miller Furn. Co.	Leather couch	3496	35 00
	Col. Lithograph Co.	Bond engraving	3497	35 00
	F. E. Calkins	Work in law library	3498	2 40
	Orvis & Marshall	Office supplies	3499	2 00
	Western U. Tel. Co.	Telegrams	3500	6 46
	Postal Tel. & Cable Co.	"	3501	44
	Columbus Bank Note Co.	Diplomas	3502	98 00
	Hofman Supply Co.	Engraving	3503	1 86

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
June 16	Jones Nat. Fence Co...	Repairing fence.....	3508	$76 61
	Harrington & Non'm'ch'r	Cleaning nilometer	3504	1 50
	McAuley Sellars Co....	Curtains	3505	6 50
	Kinnear Gager Co.....	Steel ceiling	3506	80 00
	Col. Wire & Iron Wks..	Grills	3507	12 00
14	J. Ferrell	Granite bowl	3509	36 00
16	Seraphim B. Book Co..	Binding	3510	33 95
9	Alexis Cope	Salary, June, 1900.....	3511	187 50
16	McAllister Mohler Co..	Book case.....	3512	13 50
	F. J. Heer.....	Printing bulletins	3513	680 00
	Hall-Collins Hdw. Co..	Hardware	3514	3 33
	Borger Bros. & Co.....	Grate bars	3515	13 35
	Andrews & Knight.....	Lubricator	3516	3 08
	Wolfram Guitar Co....	Piano rent	3517	31 25
	Domestic Laundry	Towel washing	3518	23 92
	Beck & Orr.....	Mounting maps	3519	1 50
	Rich. Munk & Co.....	Supplies	3520	27 36
	W. H. Miller Co.....	Gate valves	3521	12 10
	W. W. Semple.....	Economizer	3522	10 50
	M. P. Streett.....	Balance on brick work..	3523	150 00
	E. Doddington & Co....	Lumber	3524	17 40
	Murray City Coal Co...	Coal	3525	978 80
	Schoedinger, F'rn & Co.	Glass	3526	2 52
	Kelton & Converse.....	Lumber	3527	36 77
	Standard Oil Co.....	Oil	3528	31 26
	Hann & Adair.....	Printing	3529	46 70
	R. A. McClure.....	Lumber and mill work..	3530	18 65
	McClelland & Co.....	Supplies	3531	2 40
	Dunn, Taft & Co.....	Dry goods	3532	14 83
	M. C. Lilley & Co.....	Flags, medals, etc.....	3533	123 75
	Engelke & Bigelow.....	Freight and cartage.....	3534	46 18
	Central Ohio Paper Co.	Paper	3535	22 03
	Capital City Mach. Wks.	Waste, shafting, etc....	3536	13 28
	Palmer & Beck.....	Boxes	3537	67 00
	Blackwood, Green & Co.	Tin, etc.....	3538	5 98
	Z. L. White Co.....	Velveteen	3539	1 88
	J. Penn	Drayage	3540	5 38
	Tallmadge Hard. Co....	Hardware	3541	24 45
	Columbus Supply Co....	Supplies	3542	166 99
	Nitschke Bros	Printing	3543	370 05
	Champlin Printing Co..	Printing bulletins	3544	478 20
	Spahr & Glenn.....	" "	3545	21 75
	Osborne, Will's. & Horn	Coal	3546	54 70
	J. S. Abbott & Co.....	Hardware	3547	26 88
	Bradford, Rhodes & Co.	History of banking.....	3548	6 50
	J. Carbutt	Plates	3549	18 90
	G. E. Stechert.....	Books	3550	142 99
	Burrows Bros. Co.....	"	3551	49 52
	Open Court Pub. Co....	Portraits	3552	18 00
	H. W Johns Mfg Co...	Prime	3553	1 60
	Babcock & Wilcox Co..	Boiler installation	3554	53 97
	E. R. Curtiss.....	Set economists.....	3555	4 00
	Storrs & Harrison Co..	Roses	3556	7 21
	D. W. McGlenen.....	List high school names..	3557	10 00
	Egyptian Lacquer M. Co.	Lacquer	3558	1 38
	F. H. Smith.....	Leafillers	3559	3 50
	Crescent Steel Co.....	Steel	3560	25 61
	Lewis & Wiltsee.....	Advertising	3561	10 00
	Chicago Blue Pr. P. Co.	Blue print paper.....	3562	16 96
	American Aristotype Co.	Paper	3563	14 55
	J. S. Bushnell.....	Repairs	3564	3 90

STATEMENT II — Continued.

Date	To whom paid	For what purpose	No	Amount
1900				
June 16	Chicago Lab. S. & S. Co.	Supplies	3571	$3 60
	The Lunkenheimer Co..	Valves	3565	14 37
	Crosby St. G. & V. Co..	Pencil lever	3566	3 32
	Gardner Governor Co...	Pump governor	3567	27 00
	A. E. Foote	Mineral collection	3568	30 00
	E. H. Sargent	Clamps	3569	1 38
	Akron China Co	Bisque ware	3570	2 00
	Haussman & Dunn	Hauss speculum	3572	9 89
	J. C. Witter Co	Plaster casts	3573	15 74
	Storrs & Harrison Co...	Trees, stock, etc	3574	10 75
	M. J. Lampe	Charcoal	3575	9 00
	Webb Sta. & Ptg. Co...	Supplies	3576	11 70
	Am. Jersey Cattle Club.	Herd register	3577	10 00
	T Meehan & Son	Shrubs	3578	20 40
	American Cotswold Co..	Record	3579	8 00
	Am. Clydesdale Assn ..	Stud book	3580	12 00
	Colliery Engineer Co ..	Sub. Mines & Minerals	3581	2 50
	W H. Anderson & Co..	Digest Mich.	2582	18 00
	Lamson & Carpenter ..	Linear perspective set...	3583	15 00
	H B Richards, Secy...	Herd book	3584	2 00
	Jos. Battell	Register	3585	5 00
	Geo. T. King	Cooking encyclopedia....	3586	18 50
	Library Bureau	Desk and chair	3587	35 00
	Knauth, Nachod Kuehne	Books	3588	8 97
	W. O. Thompson	Salary, June, 1900	3589	416 67
	C. E. Steeb	" "	3590	60 00
	E. D. Cickins	" "	3591	58 33
	E. R. Hubler	" "	3592	33 33
	K. H. Duncan	" "	3593	54 17
	W. C. McCracken	" "	3594	150 00
	C. M. Low	" "	3595	54 17
	W. A. Standley	" "	3596	50 00
	Ben. LeBay	" "	3597	50 00
	T. M. Boude	" "	3598	45 00
	Marion Peck	" "	3599	40 00
13	Geo. R. Rose	" "	3600	65 00
	J. Garrettson	" "	3601	37 39
	Ben. Irwin	" "	3602	45 00
	J. C. Ferry	" "	3603	12 50
	G. A. Goodspeed	" "	3604	40 00
	R. E. McIntosh	" "	3605	12 50
	D. D. Geren	" "	3606	40 00
	J. H. Brown	" "	3607	15 00
	J. H. Brown	" "	3608	25 00
	W. Whitestine	" "	3609	40 00
11	M. J. Kellenberger	Serv. in dom. economy.	3610	10 00
16	G. C. Denny	Salary, June, 1900	3611	40 00
14	E. G. Bailey	" "	3612	15 00
16	A. G. McCall	" "	3613	27 00
	M. N. Cook	" "	3614	40 00
	H. Chantler	" "	3615	40 00
	A. Chantler	" "	3616	45 00
	J. Kelly	" "	3617	25 00
	W. Townsel	" "	3618	25 00
	F. J. Tyler	" "	3619	25 00
	C. H. Woodruff	" "	3620	65 00
14	W. E. Mann	" "	3621	25 00
12	T. J. Godfrey	Expenses trustee	3622	32 50
14	J. G. Sterling, Treas..	Adv. in Makio	3623	50 00
	R. M. Rownd, P. M....	Postage deposit	3624	10 00
19	R. J. Seymour	33 hours' work com'ent	3633	4 95

STATEMENT II — Concluded.

Date	To whom paid	For what purpose	No	Amount
1900				
June 19	Dr. J. H. Barrows.....	Baccalaureate address...	3634	$50 00
16	J. McLain Smith.....	Expense trustee	3625	7 55
	J. T. Mack.....	Trustee expenses	3626	13 65
	F. R. Kunkle.....	Student labor	3627	16 95
	T. A. Panter.....	Janitor service	3628	18 00
	O. I. Dick.....	Student labor	3629	14 10
	H. A. Preston.....	Choir service	3630	25 00
19	R. M. Rownd, P. M....	500 2ct postage stamps..	3631	10 00
20	R. M. Downd, P. M....	2000 stamped envelopes.	3632	42 80
21	Central Union Tel. Co.	'Phone rent to June 30..	3635	81 00
22	D. M. Massie.....	Trustee expense.....	3636	32 37
25	C. W. Gayman.....	W. J. Bryan prize.....	3637	15 65
28	R. M. Rownd, P. M....	Postage stamps	3638	10 00
	Total.....			$308,491 34

STATEMENT III.

In compliance with section 7 of the *Organic Act*, passed by the Legislature of Ohio, May 1, 1878, (Bates' Annotated Ohio Statutes, sec. 4105–41) which requires the list of "the number of professors, officers, teachers and other employes, and the compensation of each, to be annually reported," I submit the following:

Employes	Position	Salary
William Oxley Thompson	President	5,000 00
W. H. Scott	Professor of philosophy	2,250 00
(1) Edward Orton	" geology	600 00
W. R. Lazenby	" horticulture and forestry	2,250 00
Josiah R. Smith	" Greek language & literature	2,250 00
Henry A. Weber	" agricultural chemistry	2,250 00
Benj. F. Thomas	" physics	2,250 00
Geo. W. Knight	" history and political science	2,500 00
R. Daniel Bohannan	" mathematics	2,250 00
Herbert Osborn	" zoology and entomology	2,250 00
Ernst A. Eggers	" German langauge, literature	2,250 00
C. Newton Brown	" civil engineering	2,250 00
Albert M. Bleile	" anatomy and physiology	2,250 00
Wm. A. Kellerman	" botany	2,250 00
Thos. F. Hunt	" agriculture	2,250 00
Samuel C. Derby	" Latin language, literature	2,250 00
Nathaniel W. Lord	" metallurgy and mineralogy	2,000 00
Frank E. Sanborn	Director of industrial department	2,000 00
Allen C. Barrows	Professor of English literature	2,250 00
Joseph V. Denney	" rhetoric and Eng'sh lang'ge	2,250 00
Benj. L. Bowen	" Romance languages	2,250 00
W. F. Hunter	Dean of the faculty	2,500 00
Geo. B. Kauffman	Professor of pharmacy	2,000 00
J. P. Gordy	" education	2,250 00
Wm. T. Magruder	" mechanical engineering	2,250 00
Edward Orton, Jr.	Director school of ceramics	1,800 00
Frank A. Ray	Associate professor mining engineering	2,000 00
Jos. N. Bradford	Professor of drawing	1,800 00
Wm. McPherson	" " chemistry	2,250 00
Geo. W. McCoard	Associate professor mathematics	1,600 00
Sidney A. Norton	Lecturer in general chemistry	1,200 00
F. C. Caldwell	Associate professor electrical eng'eering	1,500 00
Henry C. Lord	Director observatory	1,600 00
C. E. Sherman	Assistant professor civil engineering	1,100 00
E. A. Hitchcock	Associate professor experim'al engineering	1,500 00
W. D. Gibbs	" " agriculture	1,600 00
C. W. Mesloh	" " German	1,100 00
David S. White	Professor veterinary medicine	1,600 00
Thos. E. French	Assistant in drawing	1,100 00
F. C. Clark	Associate professor of economics	1,600 00
Olive B. Jones	Librarian	1,350 00
William Henry Renck	Foreman carpenter shop	850 00
William A. Knight	" machine shops	1,000 00
Charles Philip Crowe	" forge room	800 00
J. E. Boyd	Assistant professor physics	1,200 00
Karl D. Swartzel	" mathematics	1,000 00
W. L. Graves	" rhetoric	1,000 00
Jas. S. Hine	Assistant professor of entomology	850 00
A. E. Vinson	" in agricultural chemistry	800 00
Charles B. Morrey	Assistant professor anatomy & physiology	1,000 00
John Wright Decker	Associate professor dairying	980 00
E. E. Somermeier	Assistant in metallurgy and mineralogy	700 00
Arthur W. Hodgman	Associate professor classic languages	1,100 00
Frank Ruhlen	Assistant in agriculture	720 00
J. A. Bownocker	Associate professor geology	1,000 00
W. H. Siebert	" European history	1,350 00

(1) Died October 16, 1899.

STATEMENT III — Continued.

Employes	Position	Salary
C. L. Arnold	Assistant professor of mathematics	1,000 00
Walter Landacre	" in pharmacy	700 00
W. F. Lavery	" veterinary medicine	700 00
E. E. Harold	Storekeeper	900 00
C. B. Frederick	Assistant professor veterinary medicine	700 00
Thos. K. Lewis	Assistant in drawing	600 00
Charles A. Bruce	Assistant professor of French	1,000 00
F. L. Landacre	Assistant in zoology	850 00
A. V. Bleininger	Assistant in ceramics	400 00
William E. Henderson	Assistant professor analytical chemistry	1,000 00
Harriet Townshend	Assistant in libary	550 00
Frederick E. Kester	Instructor in physics	800 00
J. H. Schaffner	Assistant professor botany	1,000 00
Charles A. Grate	Fellow in mechanical engineering	300 00
F. T. Hale	" " "	300 00
F. A. Fish	Assistant in electrical engineering	600 00
Donald Alexis Kohr	Assistant in chemistry	600 00
Herbert Charles Gore	Fellow in chemistry	300 00
Maud Jeffreys	Assistant in library	550 00
Gertrude Kellicott	" "	550 00
G. B. Guittard	" "	550 00
Lucy Allen	" "	550 00
F. K. Luke	Florist	600 00
C. P. Linhart	Director physical training	1,600 00
Perla G. Bowman	Associate professor domestic science	1,400 00
Cornelia P. Souther	Assistant in domestic science	800 00
J. R. Taylor	Assistant professor Eng literature	1,100 00
Francis M. Hamilton	" in philosophy and pedagogy	800 00
Stella Elliott Canfield	Associate director physica training	750 00
M. Dresbach	Fellow in anatomy and physiology	300 00
Emma L. Bal	" mathematics	300 00
John Wesley Young	" mathematics	300 00
A. H. McIntire	" industrial arts	300 00
Homer Charles Price	Assistant in horticulture and forestry	600 00
W. H. Page	Professor of law	1,400 00
E. B. Kinkead	"	1,200 00
D. F. Pugh	"	950 00
E. O. Randall	"	700 00
J. H. Collins	"	200 00
John A. Shauck	"	175 00
John B. Sanborn	Assistant in American history	700 00
Don C. Huddleson	" gymnasium	500 00
J. H. Vosskuehler	" drawing	300 00
Delbert A. Crowner	Student assistant in butter making	100 00
Elisha Smith	" " dairying	100 00
John B. Parker	Fellow in rhetoric	300 00
Herbert W. Kennedy	Emerson McMillin fellow in astronomy	300 00
Samuel W. Collett	Fellow in botany	250 00
Alexis Cope	Secretary	2,250 00
Carl E. Steeb	Accountant	720 00
Katharine H. Duncan	Executive clerk	650 00
Edith D. Cockins	Registrar	700 00
W. C. McCracken	Chief engineer	1,800 00
Chas. Low	Assistant engineer	650 00
Wm. Stanley	" "	600 00
Geo. R. Rose	Plumber	780 00
Benjamin Irwin	Watchman	540 00
James Kelley	Lawnkeeper	300 00
Mrs. E. R. Hubler	Telephone attendant	400 00
Benj. LeBay	Steam fitter	690 00

STATEMENT III — Concluded.

Employes	Position	Salary
Wash. Townsel	Janitor	300 00
G. A. Goodspeed	"	480 00
Henry Chantler	"	480 00
Arthur Chantler	"	540 00
J. H. Brown	"	480 00
M. N. Cook	"	480 00
D. D. Geren	"	480 00
Wm. Whitestine	"	480 00
G. C. Denny	"	480 00
E. H. Bailey	"	150 00
R. E. McIntosh	"	125 00
Wm. Weir	Elevator attendant	200 00
W. C. Mills	Curator of the archæological collection	350 00
A .G. McCall	Janitor	240 00
Thomas Boude	First fireman	450 00
W. E. Case	Second fireman	360 00
Marion Peck	Helper	400 00
Alice Dufour	Fellow in botany	250 00
F. O .Clements	" chemistry	300 00
J. F. Jeffrey	Laboratory assistant in chemistry	100 00
J. W. Groves	Assistant civil engineering	150 00
Wm. Cannan	Ceramic scholarship	200 00
Silas Martin	Assistant in drawing	500 00
W. E. Mann	McMillin fellowship in economics	250 00
Grace Pitts	Fellow in economics	300 00
J. P. Covan	Electrician	770 00
Chas. S. Prosser	Associate professor geology	1,500 00
E. H. Moore	Student assistant in German	200 00
J. W .Beach	Assistant in Latin	300 00
C. L. E. Moore	Student assistant in mathematics	150 00
A. F. Hall	Machinist	720 00
N. P. Oglesby	Assistant storekeeper	360 00
H. W. Brown	Fellow in physics	250 00
G. H. McKnight	Assistant professor of rhetoric	900 00
H. C. Allen	Asst. prof. rhetoric and public speaking	1,150 00
Chas. F. Dowd	Student assistant in French	200 00
O. V. Brumley	Assistant in veterinary medicine	500 00
Joseph Garrettson	Helper to plumber	450 00
J. C. Perry	Janitor	125 00
T. E. Osburn	"	320 00
W. Conklin	"	360 00
Earl Conway	Helper	240 00
C. H. Woodruff	Carpenter	780 00
F. J. Tyler	Gardener	75 00

COLUMBUS, OHIO, September 26, 1900.

To the Board of Trustees of the Ohio State University:

The finance committee, in obedience to your instructions, has examined the accounts and vouchers of L. F. Kiesewetter, treasurer of the university, for the fiscal year ending June 30, 1900, and has carefully compared them with the accounts and vouchers in the hands of the secretary, and hereby certifies that said report is correct.

D. M. MASSIE,
J. MCLAIN SMITH,
PAUL JONES,
Finance Committee.

REPORT OF RECEIPTS AND DISBURSEMENTS "NEW MORRILL FUND."

Report of treasurer of Ohio State University to the secretary of agriculture and the secretary of the interior, of amount received under act of congress of August 30, 1890, in aid of colleges of agriculture and the mechanic arts, and of the disbursements thereof, to and including June 30, 1900.

Balance on hand July 1, 1899	$37 31
Date of receipt of installment for 1899–1900, July 7, 1899, Amount	25,000 00
Total available for year ended June 30, 1900	25,037 31
Disbursements thereof for and during the year ended June 30, 1900:	
Agriculture, as per Schedule A	1,341 61
Mechanic Arts, as per Schedule B	8,178 19
English Language, as per Schedule C	1,258 99
Mathematical Science, as per Schedule D	2,072 82
Natural or Physical Science, as per Schedule E	7,860 40
Economic Science, as per Schedule F	1,126 99
Total expended during year	24,839 00
Balance remaining unexpended July 1, 1900	198 31

I hereby certify that the above account is correct and true, and, together with the schedules hereunto attached, truly represents the details of expenditures for the period and by the institution named, and that said expenditures were applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical physical, natural, and economic science, with special reference to their application in the industries of life, and to the facilities for such instruction.

L. F. KIESEWETTER,
Treasurer.

SCHEDULE A.

Disbursements for instruction in Agriculture and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
Thos. F. Hunt, Prof. of Agr....	Agriculture	$500
W. D. Gibbs, Asso. Professor..	"	320
Jno. W. Decker, Asso. Professor	Dairy Husbandry	140
Frank Ruhlen, Assistant.....	Agriculture	120
Perla G. Bowman, Asso. Prof...	Domestic Science	300
Cornelia Louther, Assistant.....	Domestic Art	80
H. A. Weber, Professor.....	Agricultural Chemistry	450
A. E. Vinson, Assistant.....	" "	160
W. R. Lazenby, Professor.....	Horticulture	450
Homer C. Price, Assistant.....	"	50
David S. White, Professor.....	Veterinary Medicine	160
W. F. Lavery, Asst. Professor...	" "	70
C. B. Frederick, Assistant.....	" "	70
O. V. Brumley, Assistant.....	" "	50
J. A. Wallace, Lecturer.....	Agriculture	5
II. For facilities, as follows:		
Text-books and reference books.....		$69 28
Department of Agriculture.		
Seeds, $46.70; tools and hardware, $54.92; husking, $15.00; live stock, $32.00; harness, $86.27; feed, $322.20; farm implements, $9.00; machinery, $356.77; apparatus, $40.23; supplies, $5.71		$968 80
Dairy Laboratory.		
Dairy implements, $24.00; dairy supplies, $163.58; dairy machinery, $100.79; scales, $7.00.....		$295 37
Horticulture and Forestry.		
Pots, $20.00		$20 00
Veterinary Medicine.		
Jars, $13.58; hospital supplies, $16.22; instruments, $23.36; cages, $10.00		$63 16
Total		$4,341 61

SCHEDULE B.

Disbursements for instruction in Mechanic Arts and for facilities for such instruction, during the year ended June 30, 1900.

Name of Instructors	Subjects tanght for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
C. N. Brown, Professor	Civil engineering	$450
C. E. Sherman, Asst. Professor	" "	220
John W. Groves, Assistant	" "	50
W. T. Magruder, Professor	Mechanical engineering	450
E. A. Hitchcock, Asso. Prof.	" "	300
C. A. Grate, Assistant	" "	30
F. J. Hale, Assistant	" "	30
N. W. Lord, Professor	Metallurgy and Mineralogy	400
F. A. Ray, Professor	Mine engineering	400
E. E. Somermeier, Assistant	Metallurgy	140
Edward Orton, Jr., Asso. Prof.	Ceramics	360
A. V. Bleininger, Assistant	"	90
F. C. Caldwell, Asso. Professor	Electrical engineering	320
F. A. Fish, Assistant	" "	120
J. P. Covan, Assistant	" "	70
Geo. B. Kauffman, Professor	Pharmacy	400
W. A. Landacre, Asst. Prof.	"	70
N. P. Oglesby, Assistant	"	40
F. E. Sanborn, Professor	Industrial Arts	380
W. A. Knight, Assistant	Machine work	100
W. H. Renck, Assistant	Carpenter and Pattern work	170
C. P. Crowe, Assistant	Forge work	160
A. H. McIntyre, Assistant	Industrial Arts	60
J. N. Bradford, Professor	Drawing	360
T. E. French, Asst. Professor	"	220
T. H. Lewis, Assistant	"	120
Silas Martin, Assistant	"	50
I. H. Vosskuehler, Assistant	"	30
II. For facilities, as follows:		
Text-books and reference books		$161 37
Department of Ceramics.		
Supplies, $25.22; hardware, $19.65; balances, $102.10; tile, $38.35; kiln, $351.99; pump, $4.61		541 92
Department of Civil Engineering.		
Tapes		5 36
Department of Drawing.		
Cameras, $230.75; drawing tables, $22.50		253 25
Department of Electrical Engineering.		
Castings, $81.28; electrical supplies, $98.90; lantern, $30.00; motor, $260.00; instruments, $46.85; tools and hardware, $27.41.		544 44

SCHEDULE B — Concluded.

	Amount.
Department of Industrial Arts.	
Lumber, $546.19; tools and hardware, $169.24; paints, $10.30; iron and steel, $64.74; supplies, $5.67; patterns, $32.60; machinery, $4.84	833 58
Department of Mechanical Engineering.	
Supplies, $14.90; machinery, $102.12; paints, $17.55; tools, $29.95; apparatus, $32.50; thermometers, $26.25; ice, $25.00	248 27
Total	$8,178 19

SCHEDULE C.

Disbursements for instruction in English Language and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
A. C. Barrows, Professor	English Literature	$450
J. R. Taylor, Asst. Professor	" "	220
J. V. Denney, Professor	English and Rhetoric	225
H. C. Allen, Asst. Professor	" " "	115
W. L. Graves, Asst. Professor	" " "	100
Geo. H. McKnight, Assistant	" " "	90
J. B. Parker, Assistant	" " "	30
II. For facilities, as follows:		
Text-books and reference books		$28 99
Total		$1,258 99

SCHEDULE D.

Disbursements for instruction in Mathematical Science and for facilities for such instruction during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
R. D. Bohannan, Professor.....	Mathematics	$450
G. W. McCoard, Asst. Professor	"	320
C. L. Arnold, Asst. Professor...	"	200
K. D. Swartzel, Asst. Professor.	"	200
E. L. Ball, Fellow.....	"	60
J. W. Young, Assistant.....	"	60
H. C. Lord, Professor.....	Astronomy	320
II. For facilities, as follows:		
Text-books and reference books.....		$11 93
Department of Astronomy.		
Spectroscope, $200.00; electrical supplies, $11.89; electrical apparatus, $89.00; gas engine, $150.00.....		$450 89
Total		$2,472 82

SCHEDULE E.

Disbursements for instruction in Natural or Physical Science and for facilities for such instruction during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
A. M. Bleile, Professor	Anatomy and Physiology	$450
C. B. Morrey, Asst. Professor	" " "	200
M. Dresbach, Assistant	" " "	60
W. A. Kellerman, Professor	Botany	450
J. H. Schaffner, Assistant	"	210
S. W. Collett, Assistant	"	50
Alice Dufour, Assistant	"	25
W. McPherson, Professor	Chemistry	450
S. A. Norton, Lecturer	"	240
W. E. Henderson, Asst. Professor	"	200
D. A. Kohr, Assistant	"	120
F. O. Clements, Assistant	"	45
H. C. Gore, Assistant	"	30
Edward Orton, Professor	Geology	150
C. S. Prosser, Asso. Professor	"	300
J. A. Bownocker, Asso. Professor	"	200
B. F. Thomas, Professor	Physics	225
J. E. Boyd, Asst. Professor	"	120
F. E. Kester, Assistant	"	80
H. W. Brown, Assistant	"	25
H. Osborn, Professor	Zoology and Entomology	225
J. S. Hine, Asst. Professor	Entomology	85
F. L. Landacre, Asst. Professor	Zoology	85
II. For facilities, as follows:		
Text-books and reference books		$298 98
Department of Anatomy and Physiology.		
Model of brain, $10.00; supplies, $6.46; microscopes, $161.20		177 60
Department of Botany.		
Collections, $177.05; herbarium, $145.36; tools and hardware, $41.17; herbarium paper, $63.20; mica, $7.88; labels, $29.70; camera and plates, $181.90; pots, $17.10		664 26
Department of Chemistry.		
Apparatus, $488.17; chemicals, $124.31; balances, $52.75; chemical supplies, $969.13; platinum, $149.89; plates, $35.74; crucibles, $54.77		1,874 78
Department of Geology.		
Tree ferns, $10.95; specimen stone, $5.00		15 95
Department of Physics.		
Balances, $5.10; apparatus, $147.47; supplies, $31.80		184 37

SCHEDULE E — Concluded.

	Amount.
Department of Zoology and Entomology.	
Charts, $42.00; net, $9.50; bird skins, $58.30; mounting specimens, $177.25; specimens, $5.00; microscopes, $258.33; dissecting material, $15.95; drugs, $18.07; collections, $40.00.....	619 40
Total	$7,860 40

SCHEDULE F.

Disbursements for instruction in Economic Science and for facilities for such instruction, during the year ended June 30, 1900.

Name of instructors	Subjects taught for which paid from "Morrill Fund"	Amount
I. For salaries of instructors:		
Geo. W. Knight, Professor.....	History and Political Science..	$500
J. B. Sanborn, Assistant.....	" " " ..	140
F. C. Clark, Asso. Professor.....	Economics and Sociology....	320
Grace L. Pitts, Assistant.....	" " "	30
II. For facilities, as follows:		
Text-books and reference books.....		$136 99
Total		$1,126 99

University Bulletins Series 5, Number 2

OHIO STATE UNIVERSITY

THIRTIETH ANNUAL REPORT

OF THE

BOARD OF TRUSTEES

TO THE

GOVERNOR OF OHIO

FOR THE

Year Ending June 30, 1900.

PART II.

The State has no material resources at all comparable with its citizens, and no hope of perpetuity except in the intelligence and integrity of its people.

COLUMBUS
PUBLISHED BY THE UNIVERSITY
JUNE, 1900.

Entered at the Postoffice at Columbus, Ohio, as Second-Class Matter.

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1921

CALENDAR

1900

JULY

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1901

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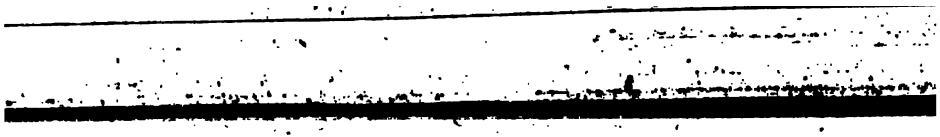
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DAYS AND DATES

1900

Entrance Examinations (8 A. M.)	Monday,	September	17.
Registration Day	Tuesday,	September	18.
Lectures and Class-work begin (all Colleges)	Wednesday,	September	19.
Annual Address by the President (11 A. M.)	Friday,	September	21.
Meeting of Trustees	Wednesday,	September	26.
Thanksgiving Recess	Thursday,	November	29.
	Friday,	November	30.
Latest date for announcing Subjects of Theses	Saturday,	December	15.
First Term ends	Wednesday,	December	19.

Christmas Vacation.

1901

Second Term begins—Registration Day	Wednesday,	January	2.
First Semester (College of Arts, Philosophy and Science, and College of Law) ends	Friday,	February	8.
Second Semester (College of Arts, Philosophy and Science, and College of Law) begins—Registration Day	Monday,	February	11.
University Day	Friday,	February	22.
Second Term ends	Friday,	March	29.
Spring Recess—From 4 o'clock P. M.	Friday,	March	29.
to 8 o'clock A. M.	Wednesday,	April	3.
Third Term begins—Registration Day	Wednesday,	April	3.
Meeting of Trustees	Wednesday,	April	3.
High School Day	Friday,	May	17.
Field Day—Athletic Association	Saturday,	May	18.
Senior Vacation begins	Saturday,	May	25.
Competitive Drill—Cadet Battalion	Saturday,	May	25.
Memorial Day	Thursday,	May	30.
Final Examinations (all Colleges)	Monday, to Friday,	June	10. to 14.
Baccalaureate Sermon	Sunday,	June	16.
Entrance Examinations (8 A. M.)	Monday,	June	17.
	Tuesday,	June	18.
Class Day	Monday,	June	17.
Meeting of Trustees	Tuesday,	June	18.
Alumni Day	Tuesday,	June	18.
COMMENCEMENT	Wednesday,	June	19.

Summer Vacation.

Entrance Examinations (8 A. M.)	Monday,	September	16.
Registration Day	Tuesday,	September	17.
Lectures and Class-work begin (all Colleges)	Wednesday,	September	18.
Annual Address by the President (11 A. M.)	Friday,	September	20.
Meeting of Trustees	Wednesday,	September	25.

BOARD OF TRUSTEES

1899-1900

		Term Expires.
JOHN T. MACK	Sandusky	May 13, 1901.
LUCIUS B. WING	Newark	" 1902.
THOMAS J. GODFREY	Celina	" 1903.
J. McLAIN SMITH	Dayton	" 1904.
PAUL JONES	Columbus	" 1905.
OSCAR T. CORSON	Columbus	" 1906.
DAVID M. MASSIE	Chillicothe	" 1907.

OFFICERS OF THE BOARD

J. McLAIN SMITH	President.
OSCAR T. CORSON	Vice President.
ALEXIS COPE	Secretary.
LOUIS F. KIESEWETTER	Treasurer.

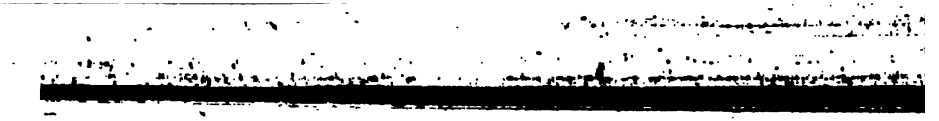
COMMITTEES OF THE BOARD

EXECUTIVE	FARM	FINANCE
L. B. WING	J. McLAIN SMITH	D. M. MASSIE
T. J. GODFREY	L. B. WING	J. McLAIN SMITH
PAUL JONES	JOHN T. MACK	PAUL JONES

FACULTY AND COURSES OF STUDY

THOMAS J. GODFREY OSCAR T. CORSON JOHN T. MACK

THE FACULTIES



Members of the Faculties, and Other Instructors

1899-1900

WILLIAM OXLEY THOMPSON.....University Grounds
President

A. B., Muskingum College, 1878; A. M., ibid., 1881; D. D., ibid., 1891; LL. D., Western University of Pennsylvania, 1897. Licensed by the Presbytery of Zanesville, Dresden, Ohio, April, 1881; Ordained by Presbytery of Fort Dodge, Iowa, July, 1882; Pastor Odebolt, Iowa, 1882-85; Pastor Longmont, Colorado, 1885-91; President Longmont College, 1885-89; President Miami University, 1891-99; present position since 1899.

*EDWARD ORTON.....100 Twentieth street
Professor of Geology, and State Geologist

A. B., Hamilton, 1848; Ph. D., Hamilton, 1875; LL. D., Ohio State University, 1881. Student of Theology, Lane Seminary, 1849; Student at Lawrence Scientific School, Harvard University, 1852; Student, Andover, 1854; Professor of Natural Science, State Normal School, Albany, N. Y., 1856-'59; Principal, Chester Academy, N. Y., 1859-'65; Professor of Natural History, Antioch, 1865-'72; President of Antioch, 1872-'73; President of the Ohio State University, 1873-'81; State Geologist, 1869; present position since 1881.

WILLIAM HENRY SCOTT.....131 Fifteenth avenue
Professor of Philosophy

A. B., Ohio University, 1862; M. A., Ohio University, 1865; LL. D., Ohio University and Ohio Wesleyan, 1884. Superintendent of Public Schools, Athens, Ohio, 1862-'64; Principal of the Preparatory Department of Ohio University, 1864-'65; Pastor of Main Street (now Trinity) M. E. Church, Chillicothe, Ohio, 1865-'67; Pastor of Town Street (now First) M. E. Church, Columbus, Ohio, 1867-'69; Professor of Greek, Ohio University, 1869-'72; President and Professor of Philosophy, Ohio University, 1872-'83; President and Professor of Philosophy, Ohio State University, 1883-'95; present position since 1895.

SIDNEY AUGUSTUS NORTON.....368 East Town street
Emeritus Professor of Chemistry

A. B., Union, 1856; A .M., Union, 1859; M. D., Miami Medical College, 1867; Ph. D., Kenyon, 1878; LL. D., Wooster, 1881. LL. D., Union, 1899. Student at Bonn, Leipsic, Heidelberg; Teacher, Poughkeepsie Collegiate Academy, 1856; Tutor, Union, 1857; Principal Hamilton (Ohio) High School, 1858; Instructor of Natural Science, Cleveland High Schools, 1859-'66; Teacher of Natural Science, Mt. Auburn, 1866-'72; Professor of Chemistry, Miami, 1867-'72; Acting Professor of Physics, Union, 1872-'73; Professor of Chemistry, Ohio State University, 1873-'95; Lecturer in Chemistry, 1895-'99; Present position since 1899.

STILLMAN W. ROBINSON.....1353 Highland street
Emeritus Professor of Mechanical Engineering

C. E., University of Michigan, 1863; D. Sc., Ohio State University, 1896; Assistant Engineer U. S. Lake Survey, 1863-'66; Instructor in Engineering, University of Michigan, 1866-'67; Assistant Professor Mining Engineering and Geology, University of Michigan, 1867-70; Professor Mechanical Engineering and Physics, University of Illinois, 1870-'78; Professor Mechanical Engineering and Physics, Ohio State University, 1878-'81; Professor Mechanical Engineering, Ohio State University, 1881-'95. Resigned in 1895. Consulting Mechanical Engineer and Inventor for Wire Grip and McKay Shoe Machinery Companies, 1884-'98; Re-elected Emeritus Professor of Mechanical Engineering, Ohio State University, 1899. State Inspector of Railroads and Bridges, 1880-84. Consulting Engineer Santa Fe R. R., 1887-'90, Consulting Engineer Lick Telescope and Mountings, 1887.

*Died, October 16, 1899.

NATHANIEL WRIGHT LORD.....888 West Eighth avenue

Professor of Mineralogy and Metallurgy, Director of the School of Mines, and Dean of the College of Engineering

E. M., Columbia, 1876; Assistant Engineer, Cincinnati, 1877; Engineer and Metallurgist Monte Grande Gold Mining Co, Nicaragua, 1878; Assistant School of Mines, O. S. U., 1879; Chemist Ohio Geological Survey, 1880-'88; Assistant Professor of Mining and Metallurgy, O. S. U., 1880-'87; Professor Mining and Metallurgy, O. S. U., 1887-'91; Professor Metallurgy and Mineralogy, O. S. U., 1896; Chemist State Board of Agriculture, 1881-'99; Chemist State Board of Health, 1896-'98; present position since 1896.

SAMUEL CARROLL DERBY.....93 Fifteenth avenue

Professor of Latin

A. B., Harvard, 1866; A. M., Harvard, 1869 (in course), 1877 (by examination). Principal of Schools, Ilion, N. Y., 1866-'67; Assistant in Dixwell's Classical School, Boston, 1867-'70; Professor of Language, Antioch, 1870-'81; President, Antioch, 1877-'81; Student, Latin and History, Harvard, 1876-'77; Student, Latin and History, Johns Hopkins, 1880-'81; Student, Latin, Harvard, 1892-'93; present position since 1881.

WILLIAM RANE LAZENBY.....348 West Eighth avenue

Professor of Horticulture and Forestry

B. Agr., Cornell, 1874; M. Agr., Iowa Agricultural College, 1887. Instructor Horticulture and Botany, Cornell, 1874-'77; Assistant Professor of Horticulture, Cornell, 1877-'81; Lecturer, N. Y. State Grange, 1874-'81; Director Ohio U. S. Experiment Station, 1882-'87; Professor of Botany and Horticulture, Ohio State University, 1881-'92; present position since 1892.

JOSIAH RENICK SMITH.....950 Madison avenue

Professor of the Greek Language and Literature

A. B., Amherst, 1871; A. M., Amherst, 1883; Principal, Mound Street School, Columbus, 1871-'73; Teacher, Columbus High School, 1873-'76; Assistant Professor of Ancient Languages, Ohio State University, 1876-'81; Student at Leipsic, 1881-'83; present position since 1883.

HENRY ADAM WEBER.....1342 Forsythe avenue

Professor of Agricultural Chemistry

Graduate of Polytechnic School, Kaiserslautern, 1866; Student, Chemistry under Von Liebig and Reischauer, and of Mineralogy under Von Kobell, Munich, 1866-'68; Ph. D., Ohio State University, 1879; Ohio Geological Survey, Chemical Department, 1869-'74; Professor of General Chemistry and Mineralogy, Illinois State University, 1874-'82; Chemist to State Board of Agriculture, Illinois, 1874-'82; Chemist to State Board of Health, Illinois, 1874-'82; State Chemist and Chief Chemist to Ohio State Dairy and Food Commissioner, 1885-'97; present position since 1884.

BENJAMIN FRANKLIN THOMAS.....University Grounds

Professor of Physics, and State Sealer of Weights and Measures

B. Sc., Ripon, 1874; M. Sc. Ripon, 1877; Ph. D., Stevens Institute, 1880. Instructor in Mathematics and Physics, Carleton College, Northfield, Minnesota, 1876-'79; Professor of Physics, University of Missouri, 1880-'85; Member of the Board of Examiners at the International Electrical Exhibition at Philadelphia, 1884; Member of the Jury of Awards, Department of Electricity, at the World's Columbian Exposition, Chicago, 1893; present position since 1885.

GEORGE WELLS KNIGHT.....University Grounds

Professor of American History and Political Science and of Constitutional Law

A. B.,.University of Michigan, 1878; A. M., University of Michigan, 1883; Ph. D., University of Michigan, 1884; Student, Law, University of Michigan, 1878-'79; Principal of High School, Lansing, Michigan, 1879-'81; Student, History and Political Science, University of Michigan, 1882-'84; Instructor in History, Ann Arbor High School, 1883-'85; Professor of History and English Literature, Ohio State University, 1885-'87; Professor of History and Political Science, Ohio State University, 1887-'98; Student at Universities of Halle, Berlin, and Freiburg, 1889-'90; present position since 1898.

ROSSER DANIEL BOHANNAN.....Sixteenth and Indianola avenues
Professor of Mathematics

B. Sc., C. E., E. M., University of Virginia, 1876; Student of Mathematics and Physics, Cambridge, England, 1880-'82; Göttingen, 1882-'83; Teacher of Mathematics and Latin, Suffolk Collegiate Institute, Virginia, 1876-'77; Teacher of Mathematics and English, New York Latin School, New York City, 1877-'78; Professor of Mathematics and Natural Science, Emory and Henry College, 1878-'80; Acting Professor of Mathematics, University of Virginia, 1883-'84; Assistant in Mathematics and Physics, University of Virginia, 1884-'87; Professor of Mathematics and Astronomy, Ohio State University, 1887-'95; present position since 1895.

C. NEWTON BROWN.....1343 Forsythe avenue
Professor of Civil Engineering

C. E., Miami, 1886; Resident Engineer of the Ironton Extension of the Pittsburg, Cincinnati, Chicago & St. Louis R. R., 1881; Ohio Geological Survey, 1882; Assistant in Mathematics and Civil Engineering, Ohio State University, 1883-'85; Associate Professor of Civil Engineering, Ohio State University, 1885-'90; present position since 1890.

ERNST AUGUST EGGERS.....190 West Eleventh avenue, University Grounds
Professor of Germanic Languages and Literatures

Student in Gymnasium at Hanover, at Michigan State Normal School, the Sorbonne, College de France; Instructor in German in the High Schools of Michigan for ten years; Assistant in German, Ohio State University, 1886-'88; Assistant Professor of German, same institution, 1888-'90; present position since 1890.

ALBERT MARTIN BLEILE.....218 King avenue
Professor of Anatomy and Physiology

M. D., Starling Medical College, 1876; Student, Vienna, Chemistry and Physiology, 1876-'77; Student, Physiology, Leipsic, 1877-'78; Student Anatomy and Histology, Paris, 1878-'79; Lecturer on Experimental Physiology, Starling Medical College, 1879; Professor of Physiology, Starling Medical College, 1884; present position since 1891.

WILLIAM ASHBROOK KELLERMAN.....175 Eleventh avenue
Professor of Botany

B. Sc., Cornell, 1874; Ph. D., Zurich, 1881; Professor of Natural Science, Wisconsin State Normal School, 1874-'79; Professor of Botany and Horticulture, Kentucky State College, 1881-'82; Professor of Botany and Zoology, Kansas State Agricultural College, 1883-'87; Professor of Botany, Kansas State Agricultural College, 1888-'91; Botanist, Kansas State Board of Agriculture, 1883-'91; Ohio Geological Survey (Botany) 1892-'93; Founder and Editor of the Journal of Mycology, 1885-'89; present position since 1891.

THOMAS FORSYTH HUNT.....188 West Tenth avenue
Professor of Agriculture, and Dean of the College of Agriculture and Domestic Science

B. Sc., University of Illinois, 1884; M. Sc., University of Illinois, 1892; Assistant to Illinois State Entomologist, 1885-'86; Assistant in Agriculture, University of Illinois, 1886-'88; Assistant Agriculturalist, Illinois Experiment Station, 1888-'91; Professor of Agriculture, Pennsylvania State College, 1891-'92; present position since 1892.

GEORGE BEECHER KAUFFMAN.....University Grounds
Professor of Pharmacy, and Dean of the College of Pharmacy

B. Sc., Ohio Wesleyan University, 1877; Pharm. D., Scio, 1894; Associate Professor of Pharmacy, Ohio State University, to 1894; present position since 1894.

BENJAMIN LESTER BOWMAN.....775 East Broad street
Professor of Romance Languages and Literature

A. B., University of Rochester, 1881; Ph. D., Johns Hopkins University, 1888. Postgraduate work, University of Rochester, 1881-'82; Professor of Languages, New Windsor College, Maryland, 1882-'83; Graduate Student and Assistant in French, Johns Hopkins University, 1883-'86, and 1887-'88; Student at the University of Paris, Bonn, Rome and Madrid, 1885, and 1886-'87; Professor of French and Latin, Bowdoin College, 1888-'89; Acting Associate Professor of French Language and Literature, Ohio State University, 1889-'90; Associate Professor of Romance Languages and Literatures, Ohio State University, 1890-'94; present position since 1894.

JOSEPH VILLIERS DENNEY.....230 West Tenth avenue

Professor of Rhetoric and the English Language, and Secretary of the University Faculty

A. B., University of Michigan, 1885. Journalist, 1885-'88; Principal of the Aurora (Illinois) High School, 1888-'90; Instructor in English and Graduate Student, University of Michigan, 1890-'91; Associate Professor of Rhetoric, Ohio State University, 1891-'94; present position since 1894.

ALLEN CAMPBELL BARROWS.....85 West Tenth avenue

Professor of English Literature, and Dean of the College of Arts, Philosophy and Science

A. B., Western Reserve, 1861; A. M., Western Reserve, 1866; D. D., Iowa College, 1889. Teacher, Latin and Greek, Phillips Academy, 1865-'66; Professor of Physics, Western Reserve, 1866-'70; Professor of Latin and English Literature, Western Reserve, 1870-'71; Professor of English Literature and History, Iowa Agricultural College, 1887-'94; present position since 1894.

EDWARD ORTON, JR.....The Normandie

Director of the Department of Clay-Working and Ceramics

E. M., Ohio State University, 1884. Assistant on Ohio Geological Survey, 1882; Chemist for Columbus and Hocking Coal and Iron Company, 1885-'86; Superintendent of Blast Furnace at New Straitsville, O., 1887-'88; Superintendent of Victoria Furnace, Goshen Bridge, Va., 1888; Steel Worker, Homestead Steel Works, Homestead, Pa., 1889; Superintendent Ohio Paving Company's Factory, Columbus, Ohio, 1890-'92; Special Assistant on Clays, Ohio Geological Survey, 1892; Superintendent Acme Vitrified Brick Co., Louisville, Kentucky, 1893; State Geologist of Ohio, 1899; present position since May, 1894.

WILLIAM FORREST HUNTER.....1032 Bryden Road; 18 Board of Trade

Dean of the College of Law, Professor of the Law of Sales, Bailments, Evidence, Mortgages, Suretyship, Construction of Contracts, Law of Corporations, Judge of Moot Courts

Admitted to the Bar in 1861; Student, University of Michigan Law School; practicing attorney since 1866; Dean of the Law School, Ohio State University, 1892-'96; present position since 1896.

DAVID FRANKLIN PUGH.....1320 Highland street; Board of Trade

Professor of Equity Jurisprudence, Law of Real Property and Municipal Corporations

Member of West Virginia Constitutional Convention, 1872; Member of Legislature, West Virginia, 1874-'75; Prosecuting Attorney, Tyler County, West Virginia, 1870-'80; Common Pleas Judge, Franklin County, Ohio, 1887-'99; present position since 1891.

EMILIUS OVIATT RANDALL.....1025 Oak street; Supreme Court Room

Professor of Agency, Commercial Law and Partnership

Ph. B., Cornell, 1874; LL. B., LL. M., Ohio State University, 1892. Admitted to practice, 1890; Secretary Ohio State Historical Society; Reporter Supreme Court of Ohio. Present position since 1893.

EDGAR BENTON KINKEAD.....Wyandotte avenue; Board of Trade

Professor of Pleading and Probate Practice, Torts, Criminal Law, Ethics, Trial Practice and Law of Contracts (Engineers)

Assistant State Law Librarian, 1887-1894; Special Counsel for Attorney-General of Ohio, 1897-1900. Present position since 1895.

WILLIAM HERBERT PAGE.....1068 Franklin avenue; 27 Board of Trade

Professor of Elementary Law, Contracts and Wills

B. A., Yale, 1889; LL. B., Ohio State University, 1892; LL. M., same institution, 1894. Instructor in Central High School, Columbus, Ohio, 1889-'96. Present position since September, 1896.

WILLIAM THOMAS MAGRUDER.....191 King avenue

Professor of Mechanical Engineering

M. E., Stevens Institute of Technology, 1881. Practical Experience in Machine Design and Shop Practice, Taunton, Mass., 1881-'86. Student in Chemistry and Mathematics, etc., Johns Hopkins University, 1886-'87; Professor of Mechanical Engineering (practical and theoretical) Vanderbilt University, 1887-'96; present position since September, 1896.

J. P. GORDY.....The Normandie
Professor of Education

Ph. D., University of Leipsic, 1884; LL. D., Western University of Pennsylvania, 1897. Student in Philosophy at Leipsic, 1883–'84; Student in Philosophy at Johns Hopkins University, 1886; Assistant in Revision of Webster's Dictionary, 1884–'85; Professor of Philosophy and Pedagogy, Ohio University, Athens, 1886–'96; present position since September, 1896.

WILLIAM McPHERSON.....97 Hamilton avenue
Professor of Chemistry

B. Sc., Ohio State University, 1887; M. Sc., Ohio State University, 1890; D. Sc., Ohio State University, 1895; Ph. D., University of Chicago, 1899; Instructor in Chemistry and Physics, Toledo High School, 1887–'89; Instructor in Chemistry and Latin, Toledo High School and Manual Training School, 1889–'92; Assistant in Chemistry, Ohio State University, 1892–'93; Assistant Professor in Chemistry, Ohio State University, 1893–'95; Associate Professor, General Chemistry, Ohio State University, 1895–'97; present position since 1897.

JOSEPH NELSON BRADFORD.....54 West Tenth avenue
Professor of Drawing

M. E., Ohio State University, 1883. Draftsman, Ohio Geological Survey, 1882; Machinist and Draftsman, Pittsburg, Cincinnati & St. Louis Railroad, 1883–85; Assistant in Mechanical Engineering and Drawing, Ohio State University, 1885–'90; Assistant Professor of Drawing, Ohio State University, 1890–'93; Associate Professor of Drawing, Ohio State University, 1893–'99. Present position since 1899.

DAVID STUART WHITE.....West Fifth avenue
Professor of Veterinary Medicine, and Dean of the College of Veterinary Medicine

D. V. S., Ohio State University, 1890. Student, Royal Veterinary Schools of Hanover, Berlin, 1890–'91; at Imperial Veterinary Institute of Vienna, 1892; Royal Veterinary College of Dresden, 1893; Assistant in Veterinary Medicine, Ohio State University, 1893–'95. Present Position since 1895.

HERBERT OSBORN.....485 King avenue
Professor of Zoology and Entomology

B. Sc., Iowa Agricultural College, 1879. M. Sc., same institution, 1880. Student of Entomology at Museum Comparative Zoology (Cambridge, Mass.) 1881–'82; College of Physicians and Surgeons, Des Moines, 1884–85 (Anatomy and Physiology); Zoological Station Naples (Smithsonian table), 1894–'95. Assistant in Zoology and Entomology, Iowa Agricultural College, 1880–'83; Assistant Professor of Zoology and Entomology, Iowa Agricultural College, 1884–'85. Professor of Zoology and Entomology, Iowa Agricultural College, 1886–'98; Special Agent Division of Entomology, U. S. Department of Agriculture, 1885–'94; Entomologist, Iowa Experiment Station, 1890–'93; State Entomologist, Iowa, 1898. Present position since 1898.

FRANK EDWIN SANBORN.....880 West Eighth avenue
Director of the Department of Industrial Arts

S. B., in Mechanical Engineering, Massachusetts Institute of Technology, 1889. Assistant in Drawing, Massachusetts Institute of Technology, 1889–'90; Teacher in Manual High School Department, Pratt Institute, 1890–'91; Walker Special Instructor, Tufts College, 1891–'94; Instructor in Mechanical Department, Tufts College, 1894–'98. Present position since September, 1898.

HENRY CURWEN LORD.....401 West Sixth avenue
Director of the Emerson McMillen Observatory, and Associate Professor of Astronomy

B. Sc., University of Wisconsin, 1889. Assistant in Washburn Observatory, University of Wisconsin; with Thompson-Houston Electric Company, 1889; Assistant in Mathematics and Astronomy, Ohio State University, 1891–'94; elected Fellow, Royal Astronomical Society, 1897; Present position since 1895.

CHRISTOPHER P. LINHART.....Gymnasium; The Vendome
Director of the Gymnasium, and Instructor in Physical Education

M. D., Western Reserve University, Cleveland, 1882. Post-graduate student, same institution, 1882-'83. Student and Instructor, Dr. Anderson's Normal School of Physical Education, 1886; student in Harvard Summer School, 1887; House Physician and Surgeon, Cleveland City Hospital, 1883-'85; Assistant Demonstrator of Anatomy, Western Reserve University, 1885-'86, and Assistant Visiting Physician Charity Hospital, Cleveland, 1886; Director of Y. M. C. A. Gymnasium, Orange, N. J., 1886 and 1888; Instructor in Physiology and Physical Education, Newark, (N. J.), Academy, 1887 and 1890, and Director of Physical Education, Newark, N. J., Public Schools, 1888-'90; Medical Director Manhattan Athletic Club, 1891 and 1892; Instructor in Physiology and Physical Education, Union College, 1892-'97. Present position since 1897.

JAMES MADISON BURNS.....The Columbus Club
Professor of Military Science and Tactics

Graduate of the Beaver Academy, Pennsylvania. Entered the volunteer service 1861; discharged July 17th, 1865. Appointed second lieutenant 17 infantry U. S. A.; promoted to first lieutenant and captain same regiment; served thirty-one years in that organization, the greater portion of the time on the extreme frontier. Promoted to major and retired on account of disability incurred in the line of duty, May 22, 1899. Appointed to present position October 1st, 1899.

FRANK ARNOLD RAY.....137 King avenue
Associate Professor of Mine Engineering

E. M., Ohio State University, 1887. Superintendent building construction, Elah Terral & Co., 1887-'88; Assistant Mining Engineer C. & H. C. & I. Co, 1888-'89; Chief Engineer C. & H. C. & I. Co, 1889-92; Chief Engineer Congo Coal Mining Co., 1892-'95; Assistant Professor of Mine Engineering, O. S. U., 1895-'97; present position since 1897.

FRANCIS CARY CALDWELL.....55 Cleveland avenue
Associate Professor of Electrical Engineering

A. B., Cornell, 1890; M. E. Cornell, 1891. With Thompson-Huston Electric Co., Lynn Mass., 1891-'92; Student at the National Polytechnic, Zurich, 1892-'93; Assistant Professor of Electrical Engineering, Ohio State University, 1893-'97. Present position since 1897.

PERLA G. BOWMAN.....The Dennison
Associate Professor of Domestic Science; in charge of the Department of Domestic Economy

Graduate of Toledo High School; Graduate of Toledo Manual Training School; Student at Wells College; Instructor in Toledo Manual Training School; Director of Domestic Science, Toledo Manual Training School; Special Student at Pratt Institute (Brooklyn), and the University of Michigan. Present position since September, 1897.

FREDERICK CONVERSE CLARK.....1634 Neil avenue
Associate Professor of Economics and Sociology

A. B., University of Michigan, 1887; A. M., University of Michigan, 1888; Ph. D., University of Michigan, 1891. Student at Halle and Berlin, 1893-'95; Instructor in History and Economics, Ann Arbor High School, 1888-'92; Assistant Professor of Political Economy, Stanford University, 1892-'93; Assistant Professor of Economics and Sociology, Ohio State University, 1895-'98. Present position since 1898.

WILBUR HENRY SIEBERT.....1832 Highland street
Associate Professor of European History

A. B., Ohio State University, 1888; A. B., (with honorable mention) Harvard University, 1889; M. A., Harvard, 1890. Student, Freiburg and Berlin, 1890-'91; Student, Harvard, 1895; Assistant in History and Political Science, Ohio State University, 1891-'93; Assistant Professor of History, Ohio State University, 1893-'95, 1897-'98; Student, Harvard University, 1895-'97. Present position since 1898.

OLIVE B. JONES.....53 Eleventh avenue
Librarian

Assistant Librarian, 1887. Present position since 1898.

EMBURY ASBURY HITCHCOCK.....380 West Eighth avenue
Associate Professor of Experimental Engineering

M. E., Cornell, 1890. Straightline Engine Company, Syracuse, N. Y., 1889; Corliss Steam Engine Company, Providence, R. I., 1890-'93; Assistant in Mechanical Engineering, Ohio State Univerversity, 1893-'95; Assistant Professor of Mechanical Engineering in charge of the Department, 1895-'96; Assistant Professor, Experimental Engineering, Ohio State University, 1896-'97. Present position since 1897.

WILLIAM DAVID GIBBS.....The Dennison
Associate Professor of Agriculture

B. Sc., University of Illinois, 1893. Fellowship in Agriculture, University of Illinois, 1893-'94; Post-graduate work, University of Illinois and University of Wisconsin, 1895; Expert Assistant in Division of Agricultural Soils of the United States Department of Agriculture, summer of 1895; Teacher of Bacteriology, University of Illinois, fall term, 1893; Assistant in Animal Husbandry, University of Illinois, winter term, 1894; Assistant in Agriculture, Ohio State University, spring and fall terms, 1895; Assistant Professor of Agriculture, 1895-'98. Present position since 1898.

STELLA ELLIOTT CANFIELD.....1457 Worthington street
Associate Director of the Gymnasium

Student, University of Nebraska, three years; Chautauqua School of Physical Education, summer of 1897; Assistant in Physical Training, University of Nebraska, two years; Y. M. C. A. classes in Physical Training, Lincoln, Nebraska, one year, and in Aurora, Illinois, one year; Medical Gymnastic Course, Chautauqua School of Physical Education, Summer, 1899; Assistant Director of Gymnasium, 1897-'98. Present position since 1898.

GEORGE WASHINGTON McCOARD.....325 West Sixth avenue
Associate Professor of Mathematics

B. A., Bethany, West Virginia, 1873; M. A., Bethany, 1882. Principal of Oakdale Classical Normal Institute, Allegheny County, Pennsylvania, 1873-'74; Private Tutor in Cleveland, Ohio, 1874-'80; Principal of Public Schools, Irving Park, Chicago, 1880-'81; Teacher of Latin and Mathematics, Columbus High School, 1881-'82; Assistant in Mathematics and Latin, Ohio State University, 1882-'87. Assistant Professor of Mathematics, Ohio State University, 1887-'99. Present position since 1899.

CHARLES WALTER MESLOH.....University Grounds
Associate Professor of Germanic Languages and Literatures

A. B., Ohio State University, 1889; M. A., Ohio State University, 1895. Student in the University of Chicago, 1894; Student, University of Berlin, 1896-'97; Assistant in German, Ohio State University, 1889-'95. Present position since 1895.

ARTHUR WINFRED HODGMAN.....104 West Ninth avenue
Associate Professor of the Classic Languages

A. B., Harvard, 1890; A. M., Harvard, 1893; Ph. D. (Classical Philology) Harvard, 1896. Student in Graduate School, Harvard, Classical Philology, 1892-'96. Instructor in Preparatory Schools, Quincy, Duxbury, Mass., 1890-'92; Assistant in Greek and Latin, Ohio State University, 1896-'97. Assistant Professor of the Classic Languages, Ohio State University, 1897-'99. Present position since September, 1899.

CHARLES SMITH PROSSER.....1362 Highland street
Associate Professor of Historical Geology

B. S., Cornell University, 1883; M. S., Cornell University, 1886. Fellow in Natural History, Cornell, 1884-'85; Instructor in Paleontology, Cornell University, 1885-'88; Assistant Paleontologist, U. S. Geological Survey, 1888-'92; Professor of Natural History, Washburn College, Topeka, Kansas, 1892-'94; Assistant Geologist, U. S. Geological Survey, 1893-'94; Professor of Geology, Union College, Schnectady, N. Y., 1894-'99. Assistant Geologist, N. Y. Geological Survey, 1895-'99; Assistant Geologist, University Geological Survey of Kansas, 1896; Chief of Appalachian Division, Maryland Geological Survey since 1898. Present position since 1899.

JOHN ADAMS BOWNOCKER.....1594 Neil avenue
Associate Professor of Inorganic Geology

B. Sc., Ohio State University, 1889; D. Sc., Ohio State University, 1897. Principal of High School, Martins Ferry, 1889–'92; Fellow in Geology, University of Chicago, 1892–'94; Graduate Scholar, Yale University, 1894–'95; Assistant Geological Survey of Ohio, 1892; Assistant Geological Survey of New Jersey, 1893; Assistant in Geology, 1895–'98. Assistant Professor 1898–'99. Present position since 1899.

JOHN WRIGHT DECKER.....329 West Eighth avenue
Associate Professor of Dairying

B. Agr., University of Wisconsin, 1890. Fellow in Agriculture, University of Wisconsin, 1890–'91. Instructor in Dairying University of Wisconsin, 1891-99. Present position since 1899.

JAMES ELLSWORTH BOYD.....25 Maynard avenue
Assistant Professor of Physics

B. Sc., Ohio State University, 1891; M. Sc., Cornell, 1896. Student in Physics and Mathematics, Ohio State University, 1893–'95; Student in Experimental and Theoretical Physics, Cornell, 1895–'96; also Student in Sibley College of Mechanic Arts, Cornell, summer of 1895. Assistant in Physics, Ohio State University, 1891–'95; held scholarship in Physics, Cornell, 1895. Present position since September, 1896.

JOSEPH RUSSELL TAYLOR.....The Dennison
Assistant Professor of English Literature

B. A., Ohio State University, 1887; M. A., Columbia University, 1897. Assistant in Drawing, Ohio State University, 1889–'94; Assistant in Rhetoric, Ohio State University, 1894–'97; University Fellow in Literature, Columbia University, 1896–'97; Assistant Professor of Rhetoric, Ohio State University, 1897–'99; present position since 1899.

CHRISTOPHER ELIAS SHERMAN.....772 Oak street
Assistant Professor of Civil Engineering

C. E., Ohio State University, 1894. Engaged in Civil Engineering in Ohio, Tennessee, Virginia, North Carolina and Arizona for three years during college course. Engaged in railroad, geological and governmental engineering from graduation until September, 1896. Engineer to Park Commission, Springfield, Ohio, and U. S. Assistant Engineer at Tampa, Florida, and Huntsville, Alabama, summer of 1898. U. S. Assistant Engineer on road surveys of Yellowstone National Park, summer of 1899. Assistant in Civil Engineering, Ohio State University, 1896–'97. Present position since 1897.

WILLIAM LUCIUS GRAVES.....1313 Forsythe avenue
Assistant Professor of Rhetoric

B. A., Ohio State University, 1893; M. A., Ohio State University, 1897. Principal High School, Coshocton, 1894–'95; Fellow and Assistant in Rhetoric and English Language, Ohio State University, 1895–'96. Present position since 1896.

*CLAIR ALBERT DYE.....169 King avenue
Assistant Professor of Pharmacy

G. Ph., Ohio State University, 1891. Post-graduate student in Chemistry and Pharmacy, Ohio State University; Assistant in Chemistry and Pharmacy, 1890–'94; Assistant in Pharmacy, 1894–'98. Present position since 1898.

THOMAS EWING FRENCH.....1458 Worthington street
Assistant Professor of Drawing

M. E., Ohio State University, 1895. Assistant in Drawing Department three years preceding graduation; Draftsman, The Smith-Vaile Company, Dayton, 1888–'90; Instructor in Mechanical Drawing, Y. M. C. A., Dayton, 1888–'91; Chief Draftsman, The Smith-Vaile Company, Dayton, 1891; Assistant in Drawing, 1892–'98. Present position since 1898.

*CHARLES WILLIAM FOULK.....Leipzig, Germany
Assistant Professor of Analytical Chemistry

B. A., Ohio State University, 1894. Assistant in General Chemistry, 1896–'98. Present position since September, 1898.

* In Europe on leave of absence.

CHARLES LINCOLN ARNOLD.....828 West Eighth avenue

Assistant Professor of Mathematics

B. Sc., Ohio State University, 1890; M. Sc., Ohio State University, 1894. Post-graduate Student, University of Chicago and Ohio State University, 1894–'95. Assistant in Methematics Ohio State University, 1890–'99. Present position since 1899.

KARL DALE SWARTZEL.....57 East Eighth avenue

Assistant Professor of Mathematics

B. Sc., Ohio State University, 1893; M. Sc., Ohio State University, 1894. Fellow and Assistant in Mathematics, Ohio State University, 1894–'95. Assistant in Mathematics, Ohio State University, 1895–'99. Present position since 1899.

CHARLES A. BRUCE.....234 West Tenth avenue

Assistant Professor of the Romance Languages

A. B., Ohio State University, 1895; Student of French, Amherst, Summer School, 1895; Graduate Student, University of Chicago, Summer Quarter, 1896; Student, University of Geneva, Summer School, 1898; Student at the Sorbonne, College de France, and Ecole des Hautes-Etudes, Paris, 1898–'99; Assistant in French, Ohio State University, 1895–'99. Present position since 1899.

JOHN H. SCHAFFNER.....61 West Eleventh avenue

Assistant Professor of Botany

A. B., Baker University, Kansas, 1893. A. M., University of Michigan, 1894; M. S., Baker University, 1896. Student in Botany, Zoology and Geology, University of Michigan, 1893–'95. Student in Botany and Paleo-Botany, University of Chicago, 1896–'97. Assistant in Botany, University of Michigan, 1894–'95. Professor of Natural Sciences, South Dakota University, 1895–'96; Assistant in Botany, Ohio State University, 1898–'99. Present position since 1899.

CHARLES BYRON FREDERICK.....Veterinary Hospital

Assistant in Veterinary Medicine.

V. M. and S., Ontario Veterinary College, 1893. In practice since graduation. Fellow in Veterinary Medicine, 1897–'98; Assistant in Veterinary Medicine, 1898. Present position since 1898.

CORNELIA PORTER SOUTHER.....The Dennison

Assistant Professor of Domestic Art

Graduate of Mary Institute (Washington University), St. Louis, Mo., 1883; Certificated Student at Mary Institute, 1883–'85; Handarbeitslehrerinnen-Seminar des Carola-Vereins, Leipzig, 1886–'97. Investigations in Domestic Art Methods in foreign cities, 1896–'98; Teacher of Sewing, Mrs. Ball's Private School, St. Louis, 1898; Special Student at Pratt Institute, Brooklyn, and Teachers' College, Columbia University, New York. Present position since February, 1899.

CHARLES BRADFIELD MORREY.....86 King avenue

Assistant Professor of Anatomy and Physiology

B. A., Ohio State University, 1890; Post-graduate Student, Ohio State University, 1890–'91; M. D., Starling Medical College, 1896. Assistant in Latin, Ohio State University, 1890–91; Assistant in Latin and Physiology, 1891–92; Assistant in Physiology, Ohio State University, 1892–'95; Student in Vienna and Paris, 1897–'99. Present position since 1899.

WILLIAM EDWARDS HENDERSON.....41 West Eleventh avenue

Assistant Professor of Analytical Chemistry

A. B., University of Wooster, 1891; M. A., 1894; Ph. D., Johns Hopkins University, 1897. Graduate Student Johns Hopkins University, 1893–'97. Fellow in Chemistry, Johns Hopkins University, 1896–'97. Professor of Natural Sciences, College of Emporia, Kansas, 1891–'93. Professor of Chemistry, Ohio University, 1897–'99. Present position since 1899.

GEORGE H. McKNIGHT.....748 Neil avenue

Assistant Professor of Rhetoric and English Language

A. B., Cornell, 1892, Ph. D., Cornell, 1896. Instructor in English at Cornell, 1892–'97; Cornell Traveling fellow in English Philosophy, 1897–'98. Student in Freiburg, 1897–'98. Student in Paris and London, 1898–'99. Present position since 1899.

WALTER ALEXANDER LANDACRE.....1574 Summit street
Assistant Professor of Pharmacy

G. Ph. Ohio State University, 1891. Chemist Braun Sons & Co., 1891-'97. Post-graduate Student Ohio State University, 1897-'99. Present position since 1899.

HERRICK CLEVELAND ALLEN.....The Dennison
Assistant Professor of Public Speaking

Student Union College 1894-'95-'96. LL. B. Cornell University, 1898. Instructor Department of Oratory and Debate, Cornell University, 1898,'99. Present position since 1899.

WILLIAM FINLEY LAVERY.....North Dormitory
Assistant in Veterinary Medicine.

D. V. M., Ohio State University, 1890. Veterinary practitioner, 1892-'96. Present position since 1896.

JAMES HENRY COLLINS.....57 Lexington avenue; Ruggery Building
Lecturer on Federal Practice

In practice for thirty years. Present position since 1891.

JOHN ALLEN SHAUCK.....95 Winner avenue; Supreme Court Room
Lecturer on Supreme Court Practice and Special Cases

B. A., Otterbein University; LL. B., University of Michigan, 1867; A. M., Otterbein University, 1870; LL. D., Otterbein University, 1897. Judge of the Supreme Court of Ohio.

J. WARREN SMITH.....55 Cleveland avenue
Lecturer on Meteorology

WILLIAM ABNER KNIGHT.....206 West Lane avenue
Assistant in the Industrial Arts and Instructor in Machine Work

Thirteen years' practical experience in workshops. Present position since 1898.

HARRIET TOWNSHEND.....53 West Eleventh avenue
Assistant in Library

Present position since September, 1895.

THOMAS KENYON LEWIS.....1203 Dennison avenue
Assistant in Drawing

B. Sc., Ohio State University, 1894. Graduate Student, Ohio State University, 1894-'95. Summer of 1897 and summer of 1898 at Cincinnati Art Academy. Present position since graduation.

FRANCIS LEROY LANDACRE.....1332 Highland street
Assistant in Zoology

B. A., Ohio State University, 1895. Student in Chicago University, summer quarters of 1898 and of 1899. Professor of Embryology in Ohio Medical University since 1896. Present position since graduation.

JAMES STEWART HINE.....26 West Fourth avenue
Assistant in Entomology

B. Sc. (H. and F.), Ohio State University, 1893. Superintendent of the N. W. Substation of the Ohio Agricultural Experiment Station, 1893. Assistant in Horticulture, Ohio State University, 1894. Student in Entomology, Cornell, 1895. Assistant in the Division of Entomology of the United State Department of Agriculture, summers of 1897 and 1899. Present position since 1895.

MAUD DOROTHY JEFFREY.....65 West Eleventh avenue
Assistant in Library

B. Ph., Ohio State University, 1895. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

GERTRUDE STOWELL KELLICOTT.....1332 Highland street
Assistant in Library

Student, Ohio State University, 1888-'95. Student of Library Science, Ohio State University, 1895-'96. Student of Library Science, Amherst, summer of 1897. Present position since September, 1896.

ALBERT EARL VINSON.....184 West Ninth avenue
Assistant in Agricultural Chemistry

Instructor in Chemistry, Y. M. C. A., Dayton, Ohio, 1895. Present position since September, 1896.

FREDERICK EDWARD KESTER.....1473 Neil avenue
Instructor in Physics

M. E. (in E. E.), Ohio State University, 1895. M. A., Cornell, 1899. Fellow and Assistant in Physics, Ohio State University, 1895-'97. Assistant in Physics, Ohio State University, 1897-'98, held scholarship in Physics, Cornell, 1898. Present position since 1899.

FRANK RUHLEN.....North Dormitory
Assistant in Agriculture

B. Sc., (Agr.) Ohio State University, 1896.

LUCY ALLEN.....1490 Neil avenue
Assistant in Library

B. A., Ohio State University, 1897. M. A., Ohio State University, 1899. Student in Library Science under Dr. G. E. Wire, summer of 1898 at Ohio State University. Student in Harvard University, summer of 1899. Present position since September, 1898.

ALBERT V. BLEININGER.....North Dormitory
Laboratory Assistant, Department of Clay Working and Ceramics

Present position since 1898.

EDWARD EVERETT SOMMERMEIR.....1590 Neil avenue
Assistant in Metallurgy and Mineralogy

G. Ph., Ohio State University, 1898. Student Laboratory Assistant in Chemistry, 1897-'98. Present position since September, 1898.

DON CARLOS HUDDLESON.....249 West Lane avenue
Assistant in Gymnasium

G. Ph., Ohio State University, 1897. Medical Student, 1897. Summer School of Physical Training Chautauqua, 1898. Present position since 1898.

BURT BIDWELL HERRICK.....167 Tenth avenue
Instructor in Cheese Making

ELISHA SMITH
Assistant in Cheese Making

JOSEPH HENRY VOSSKUEHLER 201 West Eleventh avenue
Assistant in Drawing

Designer, Gross Lithographing Co., Dayton, Ohio, 1889-'90; Draftsman, The Stilwell-Bierce and Smith-Vaile Co., Dayton, 1890-'96; Finckel & Finckel, Patent Attorneys, Columbus, 1897. Present position since September, 1898.

CLAUDE B. GUITTARD.....80 McMillen avenue

Assistant in Library

Student in Ohio State University, 1892-'96, Assistant in Ohio State Library, 1897-'98. Student in Library Science, Washington, D. C., summer of 1899. Present position since November, 1898.

WILLIAM HENRY RENCK.....910 West Rich street

Assistant in Industrial Arts and Foreman of the Carpenter and Pattern Shops.

Fifteen years' practical experience in pattern shops and foundries, seven years as foreman. Present position since 1899.

CHARLES PHILIP CROWE.....971 Highland street

Assistant in Industrial Arts and Forge Master.

Student, Ohio Business College, Delaware, Ohio; Lebanon Normal School, Lebanon, Ohio; Teacher in Public Schools of Delaware and Union Counties, two years; Forge shop experience, seven years; Manufacturer of Steel Forgings and Springs, six years. Present position since 1899.

HOMER CHARLES PRICE.....1594 Neil avenue

Assistant in Horticulture and Forestry

B. Sc. (Agr.), Ohio State University, 1897. M. S. A., Cornell University, 1899.; Fellowship in Agriculture, Cornell, 1898-'9. Present position since September, 1899.

JOHN WESLEY GROVES.....

Assistant in Civil Engineering

C. E., Ohio State University, 1898. Engineer for the C. & H. C. & I. Co., 1898-'99. Present position since October, 1899.

FRANCIS MARION HAMILTON.....1355 North High street

Assistant in Philosophy and Education.

B. A., Indiana University, 1897. Graduate Student in Philosophy and Education, Indiana University, 1897-'98. Assistant in Philosophy, Indiana University, 1897-'98. Assistant Director of Association College, Central Y. M. C. A., Chicago, 1898-'99. Fellow-elect in Psychology in Clark University for 1899-1900. Present position since 1899.

DELBERT ALONZO CROWNER.....North Dormitory

Assistant in Butter Making

FRED ALAN FISH.....229 West Eleventh avenue

Assistant in Electrical Engineering

M. E. (in E. E.), Ohio State University, 1898. Fellow and Laboratory Assistant, 1898-'99; present position since 1899.

JOHN B. SANBORN.....215 West Tenth avenue

Assistant in American History

B. L., University of Wisconsin, 1896; M. L., University of Wisconsin, 1897; Ph. D., University of Wisconsin, 1899. Graduate Student of Wisconsin, 1896-'99. Graduate Scholar in American History, University of Wisconsin, 1898-'99. Present position since 1899.

OLIVER V. BRUMLEY.....University Grounds

Assistant in Veterinary Medicine

Veterinary Surgeon's Certificate, Ohio State University, 1897. Practiced 1897-'98. Present position since 1898.

SILAS MARTIN.....1269 Dennison avenue

Assistant in Drawing

Studied Art with J. H. Witt, E. F. Andrews and Homier. Private Teacher in Art for twenty years. Present position since 1899.

†FRANK ORVILLE CLEMENTS.....
Assistant in Chemistry

MELVIN DRESBACH.....236 West Eighth avenue
Fellow, in Anatomy and Physiology

B. Sc., Ohio State University; M. Sc., Ohio State University, 1899.

FREDERICK JAMES HALE.....75 West Third avenue
Fellow, and Laboratory Assistant in Mechanical Engineering

M. E., Ohio State University, 1898.

JOHN BERNARD PARKER.....43 East Ninth avenue
Fellow, and Assistant in Rhetoric

B. A., Ohio State University, 1898. Present position since September, 1898.

EMMA LEANNA BALL.....207 West Eighth avenue
Fellow, and Assistant in Mathematics

B. Sc., Ohio State University, 1895; M. Sc., same institution, 1896.

ALFRED HEBER McINTIRE.....84 Fifteenth avenue
Fellow in Industrial Arts

M. E. (in E. E.), Ohio State University, 1898.

DONALD ALEXIS KOHR.....1590 Neil avenue
Fellow, and Laboratory Assistant in Chemistry

B. Ph., Ohio State University, 1898. Graduate Student in Chemistry and Mathematics, 1898–'99. Laboratory Assistant in Chemistry, 1898–'99.

JOHN WESLEY YOUNG.....883 Eeast Main street
Fellow, and Assistant in Mathematics

B. Ph. Ohio State University, 1899.

HAROLD WARNER BROWN.....242 King avenue
Fellow, and Assistant in Physics

B. Sc., Cornell, 1898. Present position since 1899.

†HERBERT W. KENNEDY.....164 West Ninth avenue
Emerson McMillin Fellow

SAMUEL WILLIAMSON COLLETT.....48 Woodruff avenue W
Fellow in Botany

B. Sc., Moore's Hill College, Indiana; M. Sc., Moore's Hill College, 1894; Teacher of Physiology and Chemistry, High School, and Normal College, Glidden, Iowa, 1890–'91; Professor of Natural Science, Taylor University, Upland, Ind., 1893–'96; Professor of Natural Science, Dakota University, Mitchell, South Dakota, 1896–'99.

HERBERT CHARLES GORE.....185 West Ninth avenue
Fellow and Laboratory Assistant in Chemistry

B. S., University of Michigan, 1899.

† Resigned in January, 1900.

CHARLES ARTEMUS GRATE.....1610 Highland street
Fellow and Laboratory Assistant in Mechanical Engineering

M. E., Ohio State University, 1898.

GRACE L. PITTS.....245 East Gay street
Fellow in Economics

ALICE DUFOUR.....374 Oak street
Fellow and Assistant in Botany

Ph. B., Defiance College, 1899. Student in Botanical Department O. S. U., 1898-'99.

WILLIAM C. MILLS.....91 West Frambes avenue
Curator of Archæology

B. Sc. (H. and F.), Ohio State University, 1898. Curator and Librarian of the Ohio State Archæological and Historical Society. Museum and Library, Orton Hall, O. S. U.

CHANGES, 1900-1901

WITHDRAWN

Professor John Thomas Martin, Professor James M. Burns, Associate Professor Stella Elliott Canfield, Assistant Professor Herbert James Noyes, Assistant Professor Clair Albert Dye, Assistant Professor Edwin D. Shurter, Lecturer Faxon Franklin Duane Albery, Assistant Clark Wissler, Assistant John Ferguson Cunningham, Assistant George Washington Rightmire, Assistant Joseph K. Vosskuehler, Assistant Fred A. Fish, Assistant John B. Sanborn, Fellow and Laboratory Assistant Horace Judd, Fellow and Laboratory Assistant S. W. Collett, Fellow and Laboratory Assistant Alice Dufour, Fellow and Laboratory Assistant Donald A. Kohr, Fellow and Laboratory Assistant A .V. Bleininger, Fellow and Laboratory Assistant A. H. McIntire, Fellow and Laboratory Assistant C. A. Grate, Fellow and Laboratory Assistant F. J. Hale, Fellow and Assistant Benjamin Maag, Fellow and Assistant J. W. Young, Fellow and Assistant J. B. Parker, Fellow Edward L. Fulmer, Fellow David T. Keating, Fellow Grace L. Pitts, Fellow Emma L. Ball, Fellow William Cannan, Student Assistant J. F. Jeffrey, Student Assistant Charles F. Dowd, Emerson McMillin Scholar Wilbur E. Mann.

APPOINTMENTS

CAPTAIN GEORGE L. CONVERSE, U. S. A. (Retired).....398 Oak street
Professor of Military Science and Tactics

J. WARREN SMITH.....55 Cleveland avenue
Lecturer on Meteorology

WALLACE S ELDEN.....
Assistant Professor of Classic Languages

EDWIN E. NOBLES.....71 West Tenth avenue
Assistant in Drawing

S. S. EDMANDS.....
Assistant in Electrical Engineering

S. E. RASOR.....
Assistant in Mathematics

HENRY DAVIES.....
Assistant in Philosophy

HARRIET BURR.....
Fellow in Botany

C. P. LINVILLE.....
Fellow in Chemistry

W. L. DUBOIS.....61 West Eighth avenue
Fellow in Chemistry

CHARLES F. KIMBERLEY.....225 Marshall avenue
Fellow in Chemistry

*B. H. HIBBARD.....
Fellow in Economics

MARY W. RICE.....844 Summit street
Emerson McMillin Fellow in Economics

J. F. TRAVIS.....1621 Neil avenue
Fellow in Mathematics

WILLIAM E. BOHN.....North Dormitory
Fellow in Rhetoric and English Language

C. L. C. MOORE.....68 West Tenth avenue
Student Assistant in Mathematics

W. E. DAVIS.....199 West Eleventh avenue
Student Assistant in Mathematics

CLARA MAUD BERRYMAN.....
Associate Professor of Physical Education

ALONZO H. TUTTLE.....
Instructor in American History

SELDEN F. SYMSER.....
Fellow in Economics

GEORGE W. FROST.....
Fellow in Mechanical Engineering

CHARLES B. SAYRE.....
Fellow in American History

N. O. FORD.....
Fellow in Metallurgy, Mineralogy and Mine Engineering

*Resigned.

CHANGES IN TITLES

SIDNEY AUGUSTUS NORTON,	Lecturer in Chemistry Emeritus Professor of Chemistry
WILBUR HENRY SIEBERT,	Associate Professor of History Associate Professor of European History
CHARLES BYRON FREDERICK,	Assistant in Veterinary Medicine Assistant Professor of Veterinary Medicine
WILLIAM FINLEY LAVERY,	Assistant in Veterinary Medicine Assistant Professor of Veterinary Medicine
MAUD DOROTHY JEFFREY,	Library Assistant Assistant in Library
FREDERICK EDWARD KESTER,	Assistant m Physics Instructor in Physics
LUCY ALLEN,	Library Assistant Assistant in Library
ALBERT V. BLEININGER,	Assistant Director of the Department of Clay Working and Ceramics Laboratory Assistant, Department of Clay Working and Ceramics
CLAUDE B. GUITTARD,	Library Assistant Assistant in Library
*FRANK ORVILLE CLEMENTS,	Fellow and Laboratory Assistant in Chemistry Assistant in Chemistry
W. D. GIBBS,	Associate Professor of Agriculture Professor of Agronomy
JOHN W. DECKER,	Associate Professor of Dairy Husbandry Associate Professor of Agriculture
MELVIN DRESBACH,	Fellow and Laboratory Assistant in Anatomy and Physiology Assistant in Anatomy and Physiology
H C. LORD,	Director of the Emerson McMillin Observatory and Associate Professor of Astronomy Professor of Astronomy and Director of Emerson McMillin Observatory
HERBERT C. GORE,	Fellow and Laboratory Assistant in Chemistry Assistant in Chemistry
EDWARD ORTON, JR.,	Director of the Department of Clayworking and Ceramics Professor and Director of the Department of Clayworking and Ceramics

* Resigned in January, 1900.

CORNELIA P. SOUTHER,	Assistant Professor of Domestic Art Associate Professor of Domestic Art
F. C. CLARK,	Associate Professor of Economics Professor of Economics
C. S. PROSSER,	Associate Professor of Organic Geology Associate Professor of Historical Geology and Acting Head of the Department of Geology
J. A. BOWNOCKER,	Associate Professor of Inorganic Geology Associate Professor of Inorganic Geology and Curator of the Museum
F. E. SANBORN,	Director of the Department of Industrial Arts Professor and Director of the Department of Industrial Arts
WILLIAM H. RENCK,	Assistant and Instructor in Pattern Making Instructor in Pattern Making and Founding
W. A. KNIGHT,	Assistant and Instructor in Machine Work Instructor in Machine Work
CHARLES P. KROWE,	Assistant and Forge Master Instructor in Forging
W. F. HUNTER,	Dean and Professor of Sales, etc Dean of College of Law and Professor of Law
J. H. COLLINS,	Lecturer on Federal Practice Professor of Law
J. A. SHAUCK,	Lecturer on Supreme Court Practice Professor of Law
G. W. KNIGHT	Professor of Constitutional Law and Private Corporations Professor of Law
E. B. KINKEAD,	Professor of Pleading, etc Professor of Law
W. H. PAGE,	Professor of Elementary Law Professor of Law
E. O. RANDALL,	Professor of Agency, etc Professor of Law
D. F. PUGH,	Professor of Equity Juris, etc Professor of Law
E. A. HITCHCOCK,	Associate Professor of Experimental Engineering Associate Professor of Mechanical Engineering
FRANK A. RAY,	Associate Professor of Mine Engineering Professor of Mine Engineering

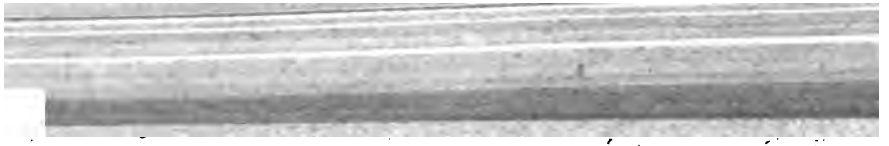
EXECUTIVE DEPARTMENT

1899-1900

WILLIAM OXLEY THOMPSON.....President
ALEXIS COPE.....Secretary Board of Trustees and Bursar
W. C. McCRACKEN.....Chief Engineer
KATHARINE H. DUNCAN.....Executive Clerk
EDITH D .COCKINS.....Registrar
CARL E. STEEB.....Accountant
CHARLES LOWE.....Assistant Engineer
THOMAS BOUDE.....First Fireman
W. E. CASE.....Second Fireman
JAMES KELLEY.....Lawnkeeper
BENJAMIN IRWIN.....Wa..tchman

JANITORS

ARTHUR CHANTLER.....University Hall
HENRY CHANTLER.....Orton Hall
G. A. GOODSPEED.....Chemical Hall
JOHN H. BROWN.....Hayes Hall
GEO. C. DENNEY.....Horticultural Hall and Veterinary Hospital
D. D. GEREN.....Gymnasium
WILLIAM WHITESTINE.....Biological Hall
M. N. COOK.....Townshend Hall



THE UNIVERSITY



OHIO STATE UNIVERSITY

HISTORY

The land grant made by the United States under an act approved by President Lincoln, July 2nd, 1862, provided that there should be granted to each State an amount of public land equal to thirty thousand acres for each Senator and Representative to which the State was entitled by the apportionment of the census of 1860. The proceeds under this act were to constitute a perpetual fund the capital of which was to remain forever undiminished and the interest of the same was to be inviolably applied by each State which should take and claim the benefits of the act to the endowment, support and maintenance of at least one "College where the leading objects shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such a manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life."

Governor Tod, in November, 1862, brought the subject before the State Board of Agriculture and later to the attention of the Legislature. In January, 1864, Hon. Columbus Delano introduced a bill accepting the grant. This became a law February 9th, 1864, and pledged the faith of the State to the performance of all the conditions and provisions contained therein. In 1866, an act introduced by Hon. J. T. Brooks, was passed, which provided for the establishment of the Ohio Agricultural and Mechanical College, but the provisions were not carried into effect and a second act introduced by Hon. R. P. Cannon was passed in 1870 entitled "An act to establish and maintain an Agricultural and Mechanical College in Ohio." Under the provisions of this act the institution was located in Columbus and the Board proceeded to the organiaztion of the college and the election of a Faculty of instruction, and the institution was opened for the reception of students on the seventeenth day of September, 1873.

In 1878 the legislature passed "An act to reorganize and change the name of the Ohio Agricultural and Mechanical College and to repeal certain acts therein mentioned." The act provided that the institution should be thereafter designated as "The Ohio State University." Up to this time but one appropriation had been made by the State for the support of the institution. With the reorganization came the larger and broader view of the State's relation to public education and since that time the Ohio State University has shared with other public educational institutions a more generous support by the State.

The governing body of the institution is a Board of Trustees, appointed by the Governor of the State and confirmed by the Senate, for terms of seven years, as provided in the law organizing the University. The original endowment has been supplemented, and the objects of the University promoted, by a permanent annual grant from the United States, under an act of 1890, by special appropriations of the General Assembly; and in 1891, by a permanent annual grant from the State, which grant was doubled by the legislature of 1896. In accordance with the spirit of the law under which it is organized, the University aims to furnish

ample facilities for education in the liberal and industrial arts, the sciences and the languages, and for thorough technical and professional study of agriculture, engineering in its various departments, veterinary medicine, pharmacy and law. Through the aid which has been received from the United States and from the State it is enabled to offer its privileges, with a slight charge for incidental expenses, to all persons of either sex who are qualified for admission.

LOCATION OF THE UNIVERSITY

The University is situated within the corporate limits of the City of Columbus, two miles north of the Union Depot and about three miles from the State Capitol. The University grounds consist of three hundred and forty-five acres, bounded east and west by High Street and the Olentangy river, respectively. The western portion, about 235 acres, is devoted to agricultural and horticultural purposes, and is under the management of the College of Agriculture and Domestic Science, The eastern portion is occupied by the principal University buildings, campus, athletic and drill grounds, a park-like meadow, and a few acres of primitive forest.

The grounds are laid out with care, ornamented with trees, shrubs and flower beds; and are so managed as to illustrate the instruction in Botany, Horticulture, Forestry, Landscape Gardening and Floriculture.

The University may be reached by either the North High street or the Neil avenue electric cars. Those wishing to go to the principal buildings of the University, to the residences on the grounds, or the Athletic field, should take a High street car going north. Those wishing to visit the Emerson McMillin Observatory, the Veterinary Hospital, Townsend Hall, Horticultural Hall and the Dormitories, will find the Neil avenue cars more convenient.

The University has thirteen buildings devoted to instruction, one Boiler House, one Power House, two Dormitories, six residences and some farm buildings. These buildings represent an investment for construction of about eight hundred thousand dollars. The equipment and apparatus amount to about one hundred and seventy thousand dollars. The land now occupied as a site with the farm is valued at one million five hundred thousand dollars.

BUILDINGS

University Hall contains the Executive offices, the office of the Secretary of the Trustees, the assembly room (seating twelve hundred persons), four halls for literary societies, the Y M. C. A. and King's Daughters' room, the Young Woman's League room and class rooms and laboratories for the departments of Economics, English Literature, German, Greek, History, Latin, Mathematics, Pedagogy, Political Science, Philosophy, Physics, Rhetoric and English Language, and Romance Languages. An electric passenger elevator connects all floors.

Mechanical Hall contains a room fitted up with cases for the care of models, instruments of precision, etc.; a room for instruction in laboratory mechanics and draughting, and laboratories with the engines, hydraulic plant, testing machines, etc.

Botanical Hall has on the first floor the lecture room of the department of Botany. There are also an office, a store room, a dark room, and a private laboratory for Physiological Botany. On the second floor is the botanical museum, the main laboratory and the assistant's laboratory. Connected with this building is a large greenhouse and propagating house.

Electrical Hall devotes the first floor to the dynamo room. The floor of this room is of asphalt, laid on a solid concrete foundation. On the second floor

are a lecture and draughting room, a photometric room, a library room, and office, stock and locker rooms.

CHEMICAL HALL is now occupied by the departments of Chemistry, Mining and Metallurgy and Pharmacy. The department of Chemistry occupies the middle portion of the first floor and the middle and western portion of the second floor. The main lecture room has a seating capacity for one hundred and fifty students. The laboratory for introductory work and qualitative analysis has accommodation for two hundred and sixty-four students. There is also a special laboratory for qualitative analysis with accommodations for twenty-five students. The main quantitative laboratory accommodates fifty students. There is also an organic laboratory, a room for the preparation of experiments, a balcony accessible both from the lecture room and preparation room, a room for combustion work, a dark room for spectroscopic work, in addition to a number of smaller rooms used for private laboratories.

The departments of Mining and Metallurgy occupy the east end of the building. In the basement are the smelting furnaces, the assay laboratory, a room for rough work and store room for supplies. On the first floor is the lecture room of the professor of Metallurgy, with a seating capacity for forty; a laboratory with desks for sixteen students, a store room, a balance room, a private laboratory and an office. On the second floor is the lecture room of the associate professor of Mine Engineering, a draughting room, a room for instruments and an office.

The department of Pharmacy occupies the first floor and basement in the west end of the building, and has a lecture room provided for sixty students; a preparation room, a laboratory with desks for twenty-five students; a room for supplies, a balance room, a model drug store and a private laboratory.

ORTON HALL is designed for the permanent accommodation of the large geological collection of the University and for work and instruction in the department of Geology. A portion of it is occupied by the library and reading room. The building is two stories in height, with a high basement, is built of brick and faced with sandstone, and is fireproof throughout. At the right of the main entrance is the geological lecture room and professor's private room; at the left is the University library, reading room and librarian's private room. The central and rear portion is occupied by the geological and paleontological museums. The petrographical laboratory is located on the second floor. In the basement a room is used for work in geographical modeling, the finished models being afterward placed in the collection of such models in a room set apart for the purpose on the second floor. The basement accommodates also the museum of economic geology. A paleontological laboratory or working room is also provided on the second floor.

The greater part of the basement of Orton Hall is occupied as a laboratory by the department of Clay-working and Ceramics. This department is also accommodated with a large room on the first floor for recitation and exhibition purposes. In the rear of Orton Hall is a small brick structure used for the kilns of this department.

HAYES HALL is devoted to instruction in Industrial Arts, Drawing, Civil Engineering and Domestic Economy. On the first floor are two offices, the rooms of the department of Domestic Economy and two lecture rooms, the machine shop, the forge shop and the foundry. On the second floor are the carpenter and pattern shops and six large lecture rooms, with private rooms annexed.

The department of Drawing occupies the third floor for instruction in mechanical drawing and free-hand drawing and photography.

HORTICULTURAL HALL contains recitation rooms and indoor laboratories of the department of Horticulture and Forestry. An extensive greenhouse is attached.

THE VETERINARY HOSPITAL contains on the first floor a veterinary museum and library, a dispensary and two private rooms for the persons in charge. On the second floor are a class room, a bacteriological laboratory and a microscopical laboratory. The rear extension contains an operating hall and a room provided with stalls, cages, etc., for the care of animals under treatment.

THE EMERSON MCMILLIN OBSERVATORY is the gift of Mr. Emerson McMillin of New York. The first floor is divided by a hall and stairway into two parts. The east wing contains an office, library, clock room and a large, well-lighted room for the students, furnished with tables, where they reduce their observations and keep the records of their work. The west wing contains the transit house, the dome and photographic dark room. The transit house is a light frame structure, so designed as to be kept as free as possible from heat radiated by any heavy walls of masonry. The dome is a wooden frame-work, covered on the outside with canvas. The rest of the building is of pressed brick, the foundation and second story being "rock-faced."

The equipment consists of a twelve-inch equatorial telescope, mounting by Messrs. Warner & Swasey, objective by Mr. Brashear, with a large and powerful spectroscope by Mr. Brashear. This instrument is adapted to use either one or two prisms or a grating, and is provided with a double set of objectives, one corrected for the visual and one for the photographic rays; a positive micrometer with a seven-inch circle by Messrs. Warner & Swasey; a combined zenith telescope and transit instrument of three inches clear aperture by Mr. G. N. Saegmüller; a sidereal clock by Clemens Riefler of Munich; a comparator by Carl Ziliss; a four inch portable equatorial by Alvan Clark; a chronograph by Warner & Swasey; sextants, chronometers, meteorological instruments, etc. In addition to the above, Mr. McMillin's gift provides for an excellent astronomical library.

TOWNSEND HALL is devoted exclusively to the instruction given in the College of Agriculture.

On the left of the entrance is the office of the Department of Agriculture and a private office, a stenographer's room and fireproof vault. Connected with the office on the south is an assistant's room, opening into a laboratory for advanced students. At the extreme south end of this floor is a large laboratory for student-work in soils and farm crops. Connected with this laboratory is a balance room, a store room and an instructor's laboratory. On the west side of the main corridor, and connected with the instructor's room, is a large class room opening into a preparation room with a dark room. This class room is fitted with all appliances for showing lantern slides of livestock, buildings, machinery, etc. On the same side of the corridor, and on the right of the stairway leading to the basement and second floor, are the class room and instructor's room for dairying. On the right of the main entrance is the department reading room. The north end of this floor is occupied by the museum with an attendant's room.

The north end of the high basement is occupied by the dairy department. This consists of a receiving room, a pasteurizing room, a store room, a refrigerator room, a lavatory, butter-making room, cheese-making room, two cheese-curing rooms and an instructor's room.

In the south end of the basement is a livestock room about forty feet square. One third of this room is occupied by raised seats, the remaining floor space being used for exhibiting and judging livestock. Connected with this is a room fitted with stalls for the temporary accommodation of livestock when needed for class exercises. The basement also contains soil storage room, bath room, toilet rooms, repair shop, locker rooms, bicycle room and janitor's room. A small detached building will furnish steam and power for the dairy department. Detached from the main building, but connected with the soil storage room by a

tramway, is a glass house for the study of soils and the experimental growth of plants.

The north end of the second story contains a large student laboratory for the department of Agricultural Chemistry, connected with an organic and analysis laboratory, a balance room, a store room and a private laboratory. The lecture room of this department is at the south end of this floor and will seat one hundred and sixty students on raised seats, with a preparation room adjoining. There is also in this floor a class room connecting with preparation room, store room and instructor's room, which is used (temporarily) by the department of Veterinary Medicine. There is also an extra class room, ladies' toilet and locker rooms and a hall for the use of the Townsend Society, designed to seat about two hundred persons.

BIOLOGICAL HALL is designed for the special accommodation of the departments of Entomology, Zoology, Anatomy and Physiology, and is fully equipped with all the latest and best apparatus for this work. It consists of a basement, in which is done all the work of preparation of subjects for the lecture tables and for the special laboratory work for the advanced students; the first floor, on which are lecture rooms, general and special laboratories, and private work rooms for the professor of Entomology and Zoology and his assistants; the second floor, similarly arranged for the work in Anatomy and Physiology; and a large wing, in which is the museum and a large lecture room. The building is fireproof throughout, and in design and general appearance is one of the most attractive on the campus.

THE GYMNASIUM AND ARMORY was first occupied in January, 1898. The drill hall and gymnasium floor is eighty feet wide by one hundred and fifty feet long. The roof is carried on curved steel arches, lighted from a clear story at the top. There is a running track around the entire room about twelve feet from the floor, back of which is a visitors' gallery seating about seven hundred persons. At the northwest corner of the floor is a stairway leading down to the men's locker and dressing room, while the young women go down a similar way at the southeast corner to their rooms. On the levtl with the main floor, near the main entrance at the south, is a large room for the use of the Commandant and his classes and rooms for the Director of the Gymnasium. Above the Commandant's room is the room for the officers of the University Cadet Corps.

The basement is very high and well lighted. On the young men's side are dressing and locker rooms, the bath room with shower and plunge baths, a bicycle room, a lecture room, the cannon room, the band room, and a large room, which is to be the home of the University Athletic Association. On the young women's side are the locker rooms and bath rooms—precisely like those provided for the young men—a bicycle room, lecture room and private office for the instruction in sanitation and hygiene for young women.

THE NORTH DORMITORY is situated at the northern limit of Neil avenue, and fronts Eleventh avenue. It is at the terminus of the Neil avenue electric car line. It is a plain structure of brick, and affords accommodation for sixty-four students.

THE SOUTH DORMITORY stands near Neil avenue within a few rods of the North Dormitory. It is also built of brick, and contains rooms for twenty students.

RESIDENCES. There are seven dwelling houses upon the University campus. Five of these are brick and two are frame structures. One is occupied by the President of the University, five by professors, and the seventh is the farm house.

ORGANIZATION OF THE UNIVERSITY

The Ohio State University is divided into six colleges, as follows:

The College of Agriculture and Domestic Science consists of those departments represented in the course leading to the degrees of Bachelor of Science in Agriculture, Bachelor of Science in Horticulture and Forestry and Bachelor of Science in Domestic Economy, and in the Course in Dairying.

The College of Arts, Philosophy and Science consists of those departments represented in the courses leading to the degree of Bachelor of Arts, Bachelor of Philosophy, and Bachelor of Science; and in the Courses Preparatory to Law and to Journalism.

The College of Engineering consists of those departments represented in the courses leading to the degrees of Civil Engineer, Engineer of Mines, Engineer of Mines in Ceramics, Mechanical Engineer, Mechanical Engineer in Electrical Engineering, and Bachelor of Science in Industrial Arts, Bachelor of Science in Chemistry or in Metallurgy; in the Course in Architecture, in the Short Course in Clay-Working and Ceramics, and in the Short Course in Mining.

The College of Law consists of those departments represented in the course leading to the degree of Bachelor of Laws.

The College of Pharmacy consists of those departments represented in the courses leading to the degree of Bachelor of Science in Pharmacy, and in the Short Course in Pharmacy.

The College of Veterinary Medicine consists of those departments represented in the course leading to the degree of Doctor of Veterinary Medicine, and to a certificate of Veterinary Surgeon.

Each college is under the direction of its own Faculty, which has power to act in all matters pertaining to the work of students in that college.

LABORATORIES AND EQUIPMENT

AGRICULTURE

The equipment of this department may be divided along three general lines: the plant, the museum and the illustrative materials.

THE PLANT. This consists of a farm of about two hundred acres, a general farm barn, a horse barn, and several smaller buildings. The farm lies along the Olentangy river, and includes both first and second bottom land. On this farm are grown general farm crops in the rotation deemed best suited to the circumstances of the Department. At present a few experiments are conducted, the general idea being to conduct such experiments as will have the largest instructional value to the students who attend the College of Agriculture. The Ohio Agricultural Experiment Station continues to conduct here the elaborate fertilizer experiments with wheat, corn and oats, which it has been making on this farm during the past five years. Different species and varieties of farm crops are grown to some extent for the purpose of class illustration and instruction, and it is expected to enlarge this feature.

Specimens of the draft, coach and roadster type of horse are kept and used in the farm work. The Department manages a milk dairy; having a herd of about forty cows, composed of pure bred and grade Jerseys and Shorthorns.

The general farm barn contains a well arranged stable for forty cows, with underground drainage and sewage cistern, a milk cooling room, a silo, a roof cellar, a work-shop, with room for hay, grain and other foodstuffs.

THE MUSEUM. This contains a large number of samples of farm products in various forms and their by-products, such as soils, grains, grasses, wools, cotton,

forage plants and foodstuff. Milling and other processes are illustrated by samples of the various products of manufacture.

The museum contains Auzoux models, samples of tools and a considerable miscellaneous collection. The collections are intended primarily for student use and not for display.

ILLUSTRATIVE MATERIALS. These consist of charts, pictures and lantern slides showing results of experiments, representative and noted specimens of livestock, farm machinery, fences, buildings, etc. The Department has and uses constantly in the class room a Beseler double oxygen–ether stereopticon. The collection of several hundred lantern slides for this purpose is constantly receiving additions.

THE AGRICULTURAL LIBRARY. While not considered as belonging specifically to this Department, there is in the general library a fairly good collection of books and periodicals devoted to agriculture, a large use of which is required of the student.

THE LABORATORY OF SOIL PHYSICS is located on the second floor of Horticultural Hall, and is supplied with apparatus for the mechanical analysis of soils and for testing their physical properties. (*See also* BUILDINGS — *Townshend Hall.*)

ARCHITECTURE

This work is carried on in connection with the Department of Drawing. The facilities for this work consist of a large, well-lighted drawing-room for the designing and drawing part of the work, a recitation room specially fitted with stereopticon lantern to illustrate the lectures, several hundred lantern slides of typical specimens of architecture from all parts of the world, a collection of scale design drawings, a collection of specifications of buildings that have been erected, a collection of plaster ornaments used in architectural decoration and a well selected collection of useful books in the library. The City contains many buildings of interest to the architectural student, both in a completed state and in process of erection.

BOTANY

The general Botanical Laboratory occupies a part of the second floor of Botanical Hall. It is 23x33 feet, and is furnished with both movable and fixed tables. The latter are attached to the west and south walls near windows, suitably shaded. Water, gas and an evaporating hood are also provided. The laboratory is equipped with compound microscopes of the Baush and Lomb, the Leitz and other patterns; and accompanying each is a tray of tools and a case of reagents. There are more than fifty dissecting microscopes, also charts, and several minor pieces of apparatus for experiments in vegetable physiology. Three smaller rooms are also provided as laboratories for special work, as well as a dark room for photography. Other facilities for the illustration of the courses in botany, and for practical training in the same, are: A general herbarium, including flowering plants, ferns, mosses, fungi and algae; a state herbarium, a collection of fruits and seeds, valuable timbers, woods, grasses and various economic products of the vegetable kingdom; ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; and a greenhouse with a fair collection of native and exotic plants. (See also MUSEUM — *The Botanical Museum;* and BUILDINGS—*Botanical Hall.*)

CHEMISTRY

The laboratories of the department accommodate from three to four hundred students. Each laboratory is equipped with all the necessary conveniences as water, gas, electric lights, distilled water piped from a large still in the attic,

steam ovens, automatic air blasts, suction pumps, etc. The department is liberally supplied with the best apparatus and materials for both lecture room and laboratory work. Each student has his own desk with drawers and locker. All supplies are procured from the chemical store room which has always on hand a complete stock of all necessary materials. (See also BUILDINGS — *Chemical Hall.*)

CIVIL ENGINEERING

The facilities provided for the illustration of the courses in civil engineering and for practical training are as follows: One high grade and three ordinary transits, four leveling instruments, solar compass, prismatic compass, improved telescope compass, Abney hand level, level and stadia rods, sight poles, chains, tapes; twenty-six improved drawing tables with 30" by 36" top; Schroeder's models in stereotomy of roof trusses; large set of models of wooden joints; collection of photographs of bridges, both when finished and in course of erection; collections of strain sheets and shop drawings of bridges; new improved cement testing machines and outfit for making all kinds of cement tests; stone mason tools for working models out of plaster blocks; magic lantern and slides; collections of samples of building materials; calculating machines; sets of drawing instruments; blue print room with outfit; sets of tracings of standard structures from which each student may make a set of blue prints. The equipment is growing each year by the addition of materials purchased, presented, or made by students of the Department.

CLAY-WORKING AND CERAMICS

The University is the first, and at this time the only institution in the United States offering special facilities for the study of clays, clay-working, and the chemical technology of the ceramic art. The facilities of the Department comprise: 1st. A convenient chemical laboratory, specially designed and equipped for the analysis and decomposition of silicates. Provision has been made for the use of hydrofluoric acid with safety, and the platinum ware has been made to order with this purpose in view. 2d. A complete mechanical outfit for the preparation of clays for pottery manufacture and the production of the ware itself, of any grade from earthen wares to porcelain. The machinery is of the latest types and comprises all important varieties in use for grinding, tempering, washing, filtering and molding. 3d. A similar plant for the manufacture of brick, tiles, pipes and hollow goods. The machinery here is of full size and samples up to a ton in weight can be received and transformed into the finished article by any or all of the standard methods in commercial use. The power for this purpose is derived from a fine electric motor, driven from the University power plant. 4th. A kiln house, equipped with a kiln in which several hundred bricks, or an equivalent quantity of sewer-pipe, stoneware, or pottery can be burnt. The fuel is intended to be coke, except in special cases where the fuel available for burning clay wares is to be made the subject of test. There is also provided a crucible melting furnace and a muffle furnace for testing glazes. A muffle kiln of large size for burning pottery, glazed ware and decorated wares has recently been put into operation. 5th. A ceramic museum, containing a fine collection of American pottery and clay products of every class, is in process of installation. 6th. A library of the best literature on the subject, mainly German but containing a few English and French works, and the trade periodicals. (See also BUILDINGS—*Orton Hall.*)

DOMESTIC ECONOMY

The Department of Domestic Economy (for young women) will secure for the course all that experience and observation may suggest. At present it has a large

kitchen, with dining room adjoining, each fitted with the latest and best appliances for the work undertaken. About a thousand dollars has been expended to make this department entirely practical, and to permit its instruction to be as thorough and as scientific as that of any other department in the University.

DRAWING

The Department occupies the entire third floor and one room in the basement of Hayes Hall, and is provided with the following equipment for the illustration of the work in drawing and for the practical training in same:

For freehand drawing, water color and oil painting:—A large studio thirty-five by eighty feet, specially arranged and provided with adjustable tilting tables and easels, a well selected collection of pencil, pen and ink, charcoal and color specimens of work, wooden models of geometric forms, plaster-casts of ornaments, flowers, fruit and the antique.

For clay-modeling:—A specially arranged and equipped studio twenty-six by thirty-two feet for modeling in clay and casting in plaster, consisting of modeling stands, moisture box, casting table, modeling tools of wood and steel, stove and vent-hood for the preparation of gelatine molds and lockers.

For mechanical drawing and mechanical and architectural designing:—A large, well lighted room forty by eighty-five feet, provided with O. S. U. drawing tables (30" by 36" tops), a set of Schroeder models, a collection of shop drawings and facilities for blue-printing.

For photography:—A well arranged and equipped dark-room, printing apparatus, copying camera, six view cameras, lenses of long and short focus, telephotographic lens, shutters for instantaneous exposures and an excellent outfit for photo-micrography.

In addition to the above, the library contains a well selected collection of books pertaining to the work of the Departments. (See also BUILDINGS—*Hayes Hall.*)

ECONOMICS AND SOCIOLOGY

The University, through the efforts and generosity of its friends, is possessed of a unique equipment for study purposes in these lines. This equipment comprises a large collection of railroad, municipal and school bonds; of stocks of all kinds; of letters of credit, drafts, foreign bills of exchange, bills of lading, checks, enclosures, statements, insurance policies, trust certificates, notes, mortgages and all the necessary forms of business paper; also collections of coins illustrative of various periods in our monetary history, foreign coins, and scrip; also sets of maps and charts and a Kiepert-Commercial Globe 80 cent. in diameter. Ample facilities for statistical work are provided and a seminary room set apart for the use of laboratory material, documents, etc., is always open to advanced students. It is the policy of the Department to make the statistical investigations and research work of advanced students contributory to the permanent equipment of the Department, thus enriching the facilities from year to year with material of scientific and pedagogical value.

ELECTRICAL ENGINEERING

The Electrical Laboratory affords very good facilities for practical experimental work with dynamo machinery and other electrical apparatus. The dynamo equipment consists of twenty-five machines of various makes and sizes from 40 H. P. down; aggregating over 200 horse power. These include direct and alternating current generators, polyphase motors, arc and incandescent lighting generators, railway and station motors and unipolar dynamo. The latter, with an alter-

nating current generator and a 2-phase motor, were built by the students; it being the policy of the Department to build as much of its apparatus as possible. There are also a number of transformers of different makes, including one for welding,—built at the University. Arc lamps of different styles, a 10-kilowatt-hour storage battery, condensers and resistances, and magnetic testing apparatus also form part of the equipment. The list of measuring instruments is quite complete, and includes a standard Weston voltmeter and eleven other Weston volt and am-meters, also four Kelvin static voltmeters, five dynamo-meters, one watt-meter, three galvanometers and a dozen other am-meters and voltmeters of different makes. A telephone laboratory—with apparatus for comparative tests, a variety of transmitters and receivers, and lines running to another building, has been in use for two years. Photometry is given at present in the Physical Laboratory, where the equipment in this line is excellent. Power for running the dynamo laboratory is supplied by three induction motors from the University Power Plant. This latter is a model 2-phase plant, and the electrical part of it has been for the most part installed by the students of the Department. The repair and maintenance of this plant is done by the students, who receive compensation for the time so spent.

GEOLOGY

The University is able to present unusual advantages for the study of Geology. By an act of the Legislature it has been put in possession of all the collections made by the late Geological Survey, and these collections have been supplemented by valuable additions of fossils and minerals from various sources. The State collection embraces a very complete representation of every geological formation shown in Ohio. In its new and ample quarters the Department offers exceptionally good opportunities for work in the lithological, petrographical and modeling laboratories. (See also MUSEUMS—*the Geological Museum*; and BUILDINGS—*Orton Hall.*)

HORTICULTURE AND FORESTRY

Among the facilities provided for the illustration of the courses in horticulture, and for practical training in the same, are: (1) a collection of horticultural tools for budding, grafting, pruning, etc.; (2) an orchard, containing well-selected varieties of the apple, pear, cherry, plum and quince; (3) a small vineyard, containing numerous varieties of the grape; (4) a garden of small fruits, containing all the best varieties of the strawberry, raspberry, blackberry, currant and gooseberry; (5) a vegetable garden, with forcing houses, cold frames, experimental plats, conveniences for irrigation, etc.; (6) small nursery and forest tree plantations, with practice rows of budding, grafting, pruning and training; (7) ornamental grounds and woodland, planted with a large variety of evergreen and deciduous trees and shrubs; (8) a greenhouse, with a fair collection of native and exotic plants; (9) a collection of preserved natural specimens, and models of fruits, seeds, woods, etc.; (10) a laboratory fairly well equipped with balances, charts and other appliances for study and research. (See also MUSEUMS—*the Botanical Museum;* and BUILDINGS—*Horticultural Hall.*)

MECHANICAL ENGINEERING

The greater part of Mechanical Hall is devoted to laboratory purposes.

The south laboratory is used for applied mechanics and for gas engineering. Here are located the machines for testing the strength and elasticity of engineering materials, and recording their physical properties automatically and autographically. Oils are tested as illuminants and as lubricants. Belts and pulleys are tested for their slippage, friction and horse-power transmitted. The gas engine plant has three engines, representing gas and gasoline, three methods

of ignition, and fly ball and inertia governors. The air is supplied by a fan through a large meter. Temperatures and pressures of air, gas and water are measured. The fresh and burnt gases are analyzed and their heating values determined by a calorimeter. The power is measured at both the indicator and the brake. The laboratory machine shop and tool room are in this room.

The north laboratory is used as a steam engineering and hydraulic laboratory. Four 35-horse-power engines give facilities for testing single and duplex condensing or non-condensing, simple or compound, throttling or automatic cut-off engines, using either a jet or a surface condenser. Pressure and vacuum guages are calibrated. Indicator springs of five makers are tested either cold or hot. Five kinds of calorimeters determine the moisture in steam before and after passing three different separators. Injectors are tested for lift, quantity, pressure and steam consumption. Steam pumps of six makes, ranging to 800 gallons per minute capacity; two centrifugal and a rotary pump, enable tests of pumps to be made and deliver water at pressures below 150 pounds to two stand-pipes, which in turn supply turbine and cascade, and Pelton water wheels, and enable experiments to be made on the flow of water through orifices, pipes, valves, etc. Three cisterns, provided with a variety of weirs up to five feet wide, give practice in measuring flowing water. A Venturi meter and a Pilot tube are also used. Ericsson and Rider hot air engines are tested. A Rife hydraulic engine, a Humphreys ram, Gem and Eureka water motors, and a pulsometer, are included in the hydraulic apparatus, all of which are connected and prepared for complete tests.

A complete set of Westinghouse air-brake apparatus, a blower and a ventilating fan, enable experiments to be performed in the flow of air. They are supplemented by tests of the heating and ventilating plants in the buildings of the campus.

In addition to the apparatus and equipment of the power plant of the University the power house at Townshend Hall contains a horizontal, return tubular boiler, two steam engines and an ammonia refrigerating machine, making the facilities on the campus for testing quite complete. Machinery, apparatus and appliances are continually being presented, built or purchased, and the student is given an opportunity to test everything under practical conditions of operation. Besides the laboratory facilities, opportunities frequently arise to test machinery, engines or boilers in the city, and in these tests the students take part.

METALLURGY

The metallurgical laboratory has all the appliances for the most modern methods of technical analysis as practiced in iron and steel laboratories, including gas analysis. A furnace room in the basement is fitted for gold and silver assaying, with improved muffle and crucible furnaces.

The lecture room in metallurgy has arrangements for projecting photographs of machines, mines and furnaces, for class illustration, and there is a large collection of such views. There is a photographic room with blue-printing facilities, where students learn to make copies of the drawings used in illustrating the lectures.

A collection of minerals and rocks with a large set of rock sections is provided for illustrating the mineralogy, as well as sets of blow-pipe apparatus for the students in determining mineralogy. (See also BUILDINGS—*Chemical Hall;* and MUSEUMS—*The Geological Museum.*)

MINE ENGINEERING

The Department is equipped with all of the latest improved instruments and apparatus used in mine engineering, surveying and the study of mine ventilation.

There is a collection of models of mine machinery and supplies, to which additions are being made which are valuable as illustrations. The draughting room is large, well lighted and provided with a desk for each student, where he is personally taught map making and the platting of actual surface and underground surveys; the making of tracings of drawings and how to make blue-prints. He is also taught the proper methods of keeping notes and all records necessary to an efficient engineers' office. The students are given practical experience by making actual surveys of coal mines and in working up their notes complete in all of the necessary details. The students are also taught how to make working drawings, plans, estimates and specifications of mining operations and equipment.

The lecture room has arrangements for projecting photographs of machines, mines and mine equipment, for class illustration, and there is a collection of such views. Also photographic room with blue-printing facilities, where students learn to make copies of the drawings made by themselves and those used in illustrating the lectures.

PHARMACY

The facilities provided for illustration of this work and for practical training are as follows: The apartments assigned to this work occupy the west end of the Chemical Hall, first floor and basement. The lecture room will accommodate sixty students, and is provided with a large lecture table and supplied with gas and water, and other conveniences for experiment. About the walls are arranged cases in which are exhibited rare and costly chemicals, curious drugs, and high-grade pharmaceuticals. Adjoining this room is the preparation room and store-room, where the supplies and apparatus and material are kept, and where the apparatus for experiment and illustration before classes is prepared. Also adjoining this room is the professor's private laboratory. The main laboratory has desks for thirty-five students, each one provided with gas and water, and sufficient storage space for material and apparatus. The laboratory is furnished with apparatus for distilling, and reclaiming, with mills, balances, drying closets, steam vaporizers, hoods and other special apparatus for pharmaceutical work. Opening into the laboratory is the drug store. This drug store is complete, and is in itself a cabinet of official drugs, and all preparations thereof. It is provided with a prescription desk and all apparatus adapted for training in prescription work. Adjoining the laboratory is the reading room, where are kept the various pharmaceutical journals, the dispensatories, and many books of reference. Also adjoining the main laboratory is the balance room, which is well provided with analytical balances, specific gravity balances and microscope, all of which are intended for higher pharmaceutical work.

In the reading room is also a cabinet of crude drugs, which have been classified and numbered but bear no name. This cabinet is adapted to the study of pharmacognosy.

In addition to the foregoing equipment, the Department is possessed of an extensive range of apparatus, by means of which any branch of work in pharmacy can be successfully pursued. The Department is complete in all its details, and affords unexcelled opportunity for the study of pharmacy. (See also BUILDINGS—*Chemical Hall.*)

PHYSICS

The Department has an excellent equipment of apparatus, to which additions are constantly being made. The apparatus includes a large collection of pieces for illustration of the general lecture room work, but is principally chosen for accurate measurement in the laboratory. A set of standards of length, capacity and mass, sent under the act of Congress supplying such sets to the several agricultural

colleges, is in the possession of the Department. The pieces are copies of the United States standards made by the Coast Survey at Washington.

Among the principal pieces of apparatus are a dividing machine by Fauth & Co.; chronometers by Parkinson & Frodsham and by Negus, the latter a break-circuit; a chronograph by Fauth & Co.; a Hipp's chronoscope; cathetometers by Salleron and by the Geneva Society, the latter an exceptionally fine instrument; Regnault's apparatus for vapor tension, for expansion of gases and for specific heat; Melloni-Tyndall apparatus for radiant heat; standard thermometers by Baudin and others; Rutherford and Rowland, different gratings; Rowland's spectrum photographs; spectroscopes by Brashear, Browning, Apps and others; Salleron's complete apparatus for projections in polarized light; lanterns for projections by the lime light and the arc light; a variety of sound apparatus from Koenig; portable and quadrant electrometers; Kelvin galvanometers of high and low resistance; Weidemann, Kohlrausch and other galvanometers; standard resistance coils, with Cavendish laboratory certificate; several sets of resistance coils and bridges; a Kew magnetometer; Kelvin standard balances; Weston ammeters and voltmeters; standards of self-induction; standard battery cells; photometric standards and photometers; X-ray apparatus, etc.

Under the laws of Ohio, the professor of physics is *ex officio* State Sealer of Weights and Measures, and all of the standard weights, measures and balances received from the United States government are in the rooms of the Department.

PSYCHOLOGY

The facilities provided for the study of anatomy, bacteriology, histology and physiology are excellent. The laboratory is supplied with skeletons, papier-mache manikin, and many models, including models of the eye, ear, larynx, etc. The apparatus of the Department for work in bacteriology and physiology is of the best and most approved construction, and is adapted to the accurate investigation of bacterial forms, as well as to the thorough performance of the fundamental physiological experiments. Myographs, spectroscopes, microscopes and the necessary chemical outfit are also provided. For work in histology the equipment includes twenty-four individual tables for student experiments, each table being supplied with a good microscope, microscopical accessories, microscopical reagents; and for advanced work, the needed apparatus for instruction in the various methods of hardening, staining, imbedding, section-cutting and injection. The laboratory also has excellent microtomes, imbedding baths and other essentials of a histological outfit. The equipment of the laboratory makes it possible to offer a large range of work for the choice of students in advanced courses. (See also BUILDINGS—*Biological Hall.*)

PSYCHOLOGY AND EDUCATION

The psychological laboratory occupies three rooms on the fourth floor of University Hall and is reasonably well equipped for work in physiological and experimental psychology and for research in related educational lines. For the study of motor processes and development the most improved form of ergograph with complete sets of myographic, chronographic, dyamometric and pneumatic recording appliances, has been provided. A complete outfit of apparatus for the study of sensation, memory and association make it possible for students of education to acquire methods of exact observation of the various mental and motor processes involved in school work. Provision has also been made for work in comparative psychology.

SHOPWORK

The shops, which occupy the north wing of Hayes Hall, afford excellent facilities for instruction in both the practical details and the underlying principles of carpentry, pattern-making, forging, moulding, foundry work and machine work.

The carpenter and pattern shop is equipped with twenty-five benches with complete sets of carpenter tools for each and a large number of special tools for general use, twenty-three pattern-makers' turning lathes with cupboards containing the necessary turning and pattern-making tools under each, a pony planer, a buzz-planer, a circular rip and cross-cut saw, a scroll saw, a trimmer and a power grindstone.

The forge shop is equipped with twenty stationary forges with anvils and tools for each, a heating forge, a portable hand forge, a foot-power hammer, a blacksmith's drill and a punch, shear and bar cutter. The blast for the forges is furnished through underground piping by a 45" Buffalo pressure blower, and the smoke is removed by a 55" Buffalo exhaust fan overhead. Both of these fans are driven by a 15-horse-power electric motor.

The foundry is equipped with a 24" Calliau cupola, the blast for which is furnished by a 30" Buffalo blower; two brass furnaces, one 16 inches in diameter and the other 20 inches in diameter; a core oven, benches for iron and brass moulding, core making and cleaning of castings, a space for floor moulding 30 feet by 40 feet, besides all the necessary moulding tools, flasks, crucibles, ladles, tongs, etc.

The machine shop is driven by a 30-horse-power electric motor from above, and is equipped with the following tools: Twenty-eight benches for vise work with complete sets of tools, eight speed lathes, sixteen engine lathes, two planers, two shapers, a milling machine, an upright drill, a sensitive drill, grinding machines for both plane and cylindrical surfaces, tool grinders, emery wheels, etc. This machinery is furnished with all the necessary tools, and the tool room is equipped with full sets of drills, taps, dies, milling cutters, standard plugs, gauges, threads, etc., micrometers and a great variety of special tools. (See also BUILDINGS—*Hayes Hall.*)

VETERINARY MEDICINE

The Veterinary Hospital affords excellent facilities for the treatment and care of animal patients, and also gives the students the opportunity to become practically familiar with the diseases to which our domesticated animals are subject. It contains box stalls, stalls for cold water applications, a large and well lighted operating hall and a special ward for dogs. The front part of the Hospital contains a lecture room, a museum of anatomical and pathological preparations, a drug dispensary and an office. In the museum are skeletons of the horse and ox, a complete manikin of the horse, papier-mache models of various anatomical parts, pathological specimens preserved in alcohol, etc.

In the library are choice collections of works in veterinary medicine and allied sciences and also copies of the leading veterinary periodicals.

The College is well equipped for surgical work. Instruments of the latest and most approved makes are kept in the instrument room for use in operations.

In the daily clinics not only are horses and dogs presented, but also the meat-producing animals from the barn, near the College.

The bacteriological laboratory in the biological department is supplied with apparatus of the most modern and improved construction, the microscopic appliances being adapted to the most accurate work in bacteriology. (See also BUILDINGS—*The Veterinary Hospital, Biological Hall.*)

ZOOLOGY AND ENTOMOLOGY

Instruction in this department is largely by the laboratory method with lectures and use of text or reference books, the effort being to lead the student to observe and think for himself. The various courses are intended to provide instruction in the elements of the science, familiarity with methods of study and investigation, and opportunity for special research involving field, laboratory, museum and library work. The adjacent fields, wood, lake and river; the various well equipped laboratories, extensive collections and libraries furnish excellent opportunities for every phase of the study.

The Department occupies the first and third floors of the fine new Biological Hall providing two lecture rooms, one general and five special laboratories, museums, offices for professor and assistants, besides room for storage, workshops, aquaria, cold-storage, photography, etc. The laboratory equipment includes microscopes, microtomes, incubators, injectors, etc., for most approved methods of work in morphology, embryology and neurology. The collections include a fine series of skeletons, a number of large mammals, series of the birds of Ohio, of the birds of North America, of Ohio fishes, of mollusks and especially rich collections of insects particularly in Odonata Hemiptera and Diptera. (See also THE MUSEUMS—*The Zoological Museum, Biological Hall.*)

The Lake Laboratory maintained at Sandusky and open during the summer vacation offers courses of instruction and exceptional opportunities for original investigation in a very interesting and delightful locality. (See Lake Laboratory.)

THE LAKE LABORATORY

The University maintains a lake laboratory during the summer vacation at Sandusky where it occupies a convenient building, the former Hatchery building, 22x26 feet located by the city water works and close to the waters of the bay and convenient to good boarding places.

It has good facilities in the way of boats, tables, aquaria, collecting appliances, while microscopes, reagents, etc., are fully supplied from the home laboratory.

It offers for the coming season courses in botany and zoology outlined below, and also opportunities for special research in any branch of biology. The professors of the departments of Botany and Zoology and Entomolgy with their assistants will constitute the staff of instruction.

The courses will be open to students and teachers generally and students of the University may receive credit for courses equivalent to University courses.

Investigators engaged upon special problems relating to the fauna or flora of the region are given the privilege of the laboratory without charge but are expected to furnish their own microscopes or other special apparatus unless otherwise arranged. For the courses of instruction, a fee of twenty dollars will be charged which will cover all expense of instruction, laboratory supplies and use of boats and admit to two full courses of eight weeks.

COURSES IN ZOOLOGY

(a) Laboratory and field courses including dissection of type forms, aquaria and field studies with instruction in collecting and preparing material for laboratory use and permanent collections. Special attention will be devoted to fishes and their food supply.

(b) Advanced courses in Invertebrate Morphology or Embryology.

(c) Special courses in Entomology, field and laboratory work.

(d) Special course in Ichthyology devoted particularly to the lake fishes, their habits and food supplies.

COURSES IN BOTANY

(a) Laboratory and field courses including a study of type forms. The course will consist of collection trips in the field where the common species of each class are found, classification of familiar forms, study of structure and special parts of interest in connection with each group, with methods of preserving and mounting for immediate use or permanent preservation.

(b) General Botany consisting largely of Morphology and Ecology.

(c) Laboratory course; the work to be arranged.

For further information write for special circular on Lake Laboratory.

THE MUSEUMS

THE GEOLOGICAL MUSEUM of the University has been collected and arranged with reference to instruction rather than to display. The basis of it is a large and comprehensive collection of the rocks, fossils and economic minerals of Ohio. The collection embraces the following named series:

(a) An excellent representation of the leading divisions of the geological scale of the State, so far as it can be illustrated by rock specimens. The specimens represent the leading phases of each formation, and in many cases carry the characteristic fossils of the horizons from which they are derived.

(b) A collection of the animal and vegetable fossils of the rocks of Ohio. This series includes a large majority of the described fossils of our formation, and in the number are many type specimens. While all the ages of our geological history are well represented, the collection of the Upper Silurian and Devonian animal fossils is particularly rich and complete. A remarkably fine series of coal plants is also included in the museum. The list of fossils has been greatly extended in the number of species and individuals by the recent purchase of the collection of Mr. Henry Moores, of Columbus.

(c) The economic minerals of the State are also shown to excellent advantage in the museum. The coals, petroleums, iron ores, clay and building stones produced in Ohio are represented in large collections. Many of the specimens upon which chemical examinations or physical tests have been based in the work of the geological survey of the State are included here.

(d) Petrographical collections: These collections were selected with a view to their use in petrographical instruction, and embrace the Hawes collection, the Krantz collection and the Rosenbusch complete series of typical rock specimens from important centers abroad. These hand specimens are supplemented by two series of thin sections, including Voigt and Hochgesang's collections of typical rocks and of the petrographically important minerals.

In addition to the collections above described, the museum contains a great deal of valuable material in the line of general geology and mineralogy. Among other things it includes several valuable suites of ores and many fine mineral specimens.

There also belong to the museum a number of geological casts, models and maps. In this series are included a relief map of the State of Ohio, and also the models of the basins of the Atlantic ocean and Caribbean sea, prepared under the supervision of the United States Coast and Geodetic Survey.

The catalogue of the museum contains more than 10,000 entries; but as only one number is as a rule given to a fossil or a mineral species, the individual speci-

mens make an aggregate list of many thousands in addition to the catalogue list, and probably double this list.

The skeleton of a mastodon, one of the extinct elephants of Ohio, has recently been presented to the museum by N. S. Conway, of Catawba, O., on whose farm it was found. It has been mounted by Prof. H. A. Ward, of Rochester, N. Y., and proves to be one of the largest in the country.

The museum also has a mounted skeleton of *Megalonyx Jeffersonii*, one of the great ground sloths. This specimen has the distinction of being the first and thus far the only mounted skeleton of this animal in the world. The bones were discovered by Abraham Drushell and others in a swamp in Berlin township, in Holmes county, O., in 1890. They were mounted in Ward's Natural Science Establishment, Rochester, N. Y. The entire outlay involved in the purchase of the bones and in mounting them was borne by Mr. Emerson McMillin, of New York.

THE ZOOLOGICAL MUSEUM is located on the ground floor of the wing of Biological Hall. The foundations of a zoological museum have been laid and the work begun on a generous plan. Every effort is being made to secure and preserve excellent specimens in all groups of animals. Not only the adult animals are preserved but the preparatory stages as well, their work and architecture, in fact all that can illustrate the life-history and habits.

Among special features are the Wheaton collection of birds of Ohio, numbering about 1,000 skins; a collection of North American birds, about 1,500 skins, representing very fully the North American fauna; a number of fine specimens of larger mammals, moose, hippopotamus, deer, tiger, peccary, lion, tapir, etc., most of which have been generously donated by Sells Brothers; a collection of about 3,500 molluscan shells; a fine series of Ohio fishes; numerous reptiles, amphibians, etc.

There is an excellent series of skeletons, crania and alcoholic material for courses in comparative anatomy.

The collection of insects is being rapidly enlarged and the purchase of the Kellicott collection of Odonata makes it especially rich in that order.

Professor Osborne's private collection of Hemiptere is deposited in the Department and available to students for comparison and study.

THE BOTANICAL MUSEUM occupies the second floor of Botanical Hall. It contains the University herbariums, both general and state, also Professor Kellerman's private herbarium of over 20,000 specimens deposited for use in the Botanical Department; a complete collection of the native woods of Ohio; a collection of the seeds and fruits of plants; a collection of native medicinal plants; a general collection of vegetable products, including seeds, textile fibres, coloring substances, etc., illustrating economic or applied botany.

THE AGRICULTURAL MUSEUM. For a description of this museum, see BUILDINGS—*Townshend Hall.*

THE ANATOMICAL AND PATHOLOGICAL MUSEUM. For a description of this museum, see Laboratories and Equipment, Veterinary Medicine.

THE MUSEUM OF CLAY-WORKING AND CERAMICS is now in process of formation. Some excellent specimens of ceramic products have already been collected, and efforts are being made to increase the collection.

ARCHAEOLOGIC COLLECTION. Orton Hall now contains the second best archæologic exhibit in the Ohio Valley, the total number of specimens owned by the Ohio State University, the Ohio State Historical and Archæological Society and by private individuals, amounting to 46,200. Although the Museum is but three years old, it has shown a remarkable growth.

Field work has been carried on in various parts of the State during the summers of 1894, 1895 and 1896, and as a result the contents of more than eighty

mounds, graves and village sites are now on exhibition. The chief exhibits, illustrating the life of ancient tribes are from Fort Ancient in Warren county, from the mound graves of the lower Scioto and from the Muskingum Valley. It is considered that in Ross county aboriginal culture reaches its highest development in the whole Ohio Valley. This fact is well attested by the presence of numerous copper objects, effigy pipes, fine ornaments and ceremonials, pottery, delicate work in polished stone and flint implements, etc.

The collection from the valley of Brush Creek and along the Ohio itself, and from the hill regions of Ohio, show a much lower grade of culture. Careful comparison of the work of man from these localities is exceedingly interesting.

There is an exhibit from Flint Ridge, illustrating the manufacture of arrow and spear heads. The Museum contains nearly 150 specimens of pottery from Missouri and Arkansas, many of which are effigies of animal, bird and human form.

The founders of the Archæologic Museum are arousing public interest in the preservation and study of Ohio antiquities; and by means of exchanges, lectures and personal solicitation, the growth of the collection is considerable.

LIBRARIES

THE UNIVERSITY LIBRARY

The University Library is located in the east end of Orton Hall. The system of department libraries prevails to a limited extent, small collections of books specially needed in connection with laboratory and class room work being deposited in several departments.

During term time the Library is open six days in the week, legal holidays being excepted. From Monday until Friday the hours are from 7:30 a. m. until 9:30 p. m.; Saturday from 7:30 a. m. until 4 p. m.

The management of the Library is vested in a Library Council which is composed of the President, the Librarian and the Deans of the six colleges.

STATE LIBRARIES

Students are privileged in being near the two State libraries.

The Ohio State Library numbers about 70,000 volumes and is a circulating one for all the citizens of Ohio. It occupies a room in the State House.

The State Law Library, also in the State House, is the largest and most complete law library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States and State reports, statutes and digests. The important legal periodicals are on file.

CITY LIBRARIES

The students of the University, as residents of Columbus, have access to the City Library and the Public School Library, under the usual regulations. The City Library numbers 28,000 volumes. It has specially pleasant reading and reference rooms. The Public School Library numbers 35,000 volumes, and is a well selected collection of books. Students will find both libraries valuable in supplementing the University Library.

SPECIAL LIBRARY IN ECONOMICS

The University possesses a special library in Economics consisting of several hundred volumes and pamphlets. Over thirty financial, commercial and trade

journals are received and filed regularly. The business men of Columbus have contributed over $1,200 for the equipment of this commercial library.

SPECIAL LIBRARY IN ZOOLOGY AND ENTOMOLOGY

The Department of Zoology and Entomology possesses a special library the nucleus of which was the scientific library of the late Prof. Kellicott which was generously donated to the Department. This has been increased by gifts of special papers by a number of the leading investigators of the country and will be enlarged as rapidly as possible. The private library of the professor is also accessible for reference.

AIDS TO MORAL AND RELIGIOUS CULTURE

Chapel services are held daily (except Saturday and Sunday) at the University, at which the attendance of all instructors and students is expected. The services consist of singing, reading the Scriptures, and prayer.

One of the most commendable organizations in the University is a branch of the International Young Men's Christian Association, organized in 1883. It has a large membership and steadily grows in influence. Services are held weekly. New students are made cordially welcome, and young church members will here enjoy Christian influences and fellowship in college life. A University Circle of the International Order of the King's Daughters and Sons holds its meeting once a week, and includes in its membership a majority of the women attending the University. A club for the study and practice of philanthropy has recently been organized by the King's Daughters.

An effort is being made, to complete, by subscription, the fund which was begun two years ago by students, alumni and professors, for the erection of a building to accommodate the student organizations of the University.

LITERARY AND OTHER SOCIETIES

The Alcyone Literary Society, open to young men, was founded in 1874; the Horton Literary Society, open to young men, was founded in 1875; the Athenæan Literary Society, open to young men, was founded in the winter of 1896–'97. The Browning Literary Society, founded in 1883, and the Philomathean Literary Society, founded in 1894, are open to young women. These societies have commodious and well furnished apartments in University Hall. They meet weekly, and their work, offering to the student a very desirable training in composition, public speaking, and parliamentary order, is a valuable adjunct to collegiate education.

The Townshend Literary Society was established in 1883 as a technical society under the name of the Kirtland Agricultural Society. In 1894, the name Townshend was substituted. In 1898, the Society changed its constitution so as to admit any student of the University and thus became a literary rather than a technical society. It meets weekly in its commodious and well arranged society room in Townshend Hall.

The Biological Club is an organization of professors and students for mutual assistance and improvement in the line of natural science. Its meetings are regularly held every two weeks, at which papers are read, notes of observation and research presented, and current biological literature discussed.

The Chemical Association, composed of the more advanced students and instructors in the Department of Chemistry and Pharmacy, has for its object the discussion of such subjects as are of importance to students of chemistry, special

stress being placed on recent discoveries. The meetings are held semi-monthly and are of great interest. Both professors and students contribute to each program.

The Political Science Club is an organization of instructors and students in political science and history for the consideration of questions in those fields. At the regular bi-weekly meetings papers are read, researches reported, and current questions and publications in political science, considered and discussed.

The Engineering Society is a similar organization of students and instructors, holding meetings bi-weekly, for the consideration of questions in the various branches of engineering.

The Organic Evolution Club was organized in the winter of 1896-'97 by those students and members of the Faculty especially interested in the study of Evolution. The Zoological Department has a similar club known as the Journal Club.

The O. S. U. Dramatic Club was organized in 1893. Its object is to present each year to the University world one of the standard legitimate dramas. Its membership is confined to University circles.

The musical organizations of the University are: The O. S. U. Glee Club, composed of sixteen members; the O. S. U. Mandoline and Guitar Club of twenty members; the O. S. U. Banjo Club of five members; the O. S. U. Orchestra of fifteen members; the O. S. U. Male Quartet and the University Cadet Band.

The Ornithological Club encourages observation and research in the study of birds and their habits, especially of our native species. The Wheaton collections in the possession of the University forms a basis of study. The programs consist of papers and discussions and reports of observation and personal work. Anyone interested in birds is eligible to membership and visitors are always welcome. The Club meets on the second and fourth Monday evenings of each month.

The O. S. U. Sketch Club has for its purpose the promotion of art interests among the students and ex-students. Any one who is or has been connected with the University in any capacity is eligible to membership. The members meet once a week and sketch from the draped human figure. Twice a month the members present sketches illustrating some word, etc., previously selected. All work is criticised by members of the club for mutual benefit.

The English Club, composed of the instructors and advanced students of the English departments, holds bi-weekly meetings at which new books in current literature are discussed and papers on literary topics are presented.

The William F. Hunter Society, in the College of Law, meets for moot-court practice and quiz-work every two weeks.

MILITARY SCIENCE AND TACTICS

Under the law of Congress establishing the University, it is required that instruction shall be given in military science and tactics. In accordance with this provision an officer of the regular army has been detailed to take charge of the Department of Military Science and Tactics; and the Trustees have directed that all male students, except those in the Law College, and such others as may be specially excused for physical disability or for having reached the age limit of twenty-five years, shall render two years of cadet service as a condition of graduation. A uniform has been prescribed with which each member is required to provide himself; and fifty minutes a day are devoted to drill, except on those days when instruction in tactics and art of war is given.

The course of instruction is both practical and theoretical. It is given by means of a systematic drill, supplemented by lectures and recitations, and is so

arranged as to occupy five hours per week throughout the year. For purposes of drill, all students enrolled in the Department are organized in a battalion, the officers of which are selected from those students who have shown special proficiency in their University work and the work of the Department. Commissioned officers and non-commissioned officers receive certificates of satisfactory service, issued by the University. A cadet band has been organized in connection with this Department, and is supplied with instruments belonging to the University and to the cadets.

The practical course in infantry embraces all the movements prescribed by the drill regulations of the U. S. Army applicable to a battalion. Instruction in artillery embraces such portions of the United States drill regulations as pertain to the formation of detachments, manual of the piece, mechanical maneuvers and aiming drill. Instruction also includes duties of sentinels, the various ceremonies performed by troops, and military signaling. The theoretical instruction includes a systematic and progressive course in drill regulations of the U. S. Army, the organization and administration of the U. S. Army and the elementary principles governing in the art of war.

Competitive drills are held yearly for two medals; one, the first prize, of gold, presented to the University by the M. C. Lilley Co., of Columbus, Ohio; the other, the second prize, of silver, presented by Lieut. Wilson, when commandant. These medals remain the property of the University, the winner wearing them until the next competition. The "President's Prize" consists of an officers' sword, given to the captain of the company having the best record for attendance for the year.

The equipments of the Department consist of three hundred Springfield cadet rifles and sets of infantry equipment, twenty officers 'swords and belts, the necessary equipment for instruction in signaling, and a few instruments for the band.

The U. S. Ordnance Department furnishes an annual allowance of one thousand rounds of ball and one thousand rounds of blank cartridges for cadet rifles.

PHYSICAL TRAINING

Competent instruction in hygiene and general sanitation is given by the director of the Gymnasium, who has entire charge of the physical training and well-being of all students. Supplementing this work, the practical instruction in military tactics is found to be a most valuable aid. In addition to this, the University grounds afford excellent opportunities for general athletics, and the students support well organized clubs in base ball, foot ball and lawn tennis. These and other sports are participated in by large numbers, and friendly contests are occasionally held with other colleges. Besides the special clubs named above, the students have an athletic association which holds an annual "Field Day," in which prizes are given to the victors in the various contests usual on such occasions.

OHIO FORESTRY BUREAU

This Bureau has been established and located at the University by the Legislature for the purpose of inquiring into the best means of preserving and utilizing the forests of the State.

TERMS AND VACATIONS

The first term of the University year 1900-1901 and thereafter will begin on the Tuesday following the sixteenth day of September and will close on the

Wednesday following the 17th day of June. The first term will close on the Wednesday preceding Christmas; the second term will begin on the Tuesday following the first day of January and will close on the Friday preceding the first Monday in April; the third term will begin on the Wednesday following the close of the second term. The second semester will begin on Monday of the eighteenth week preceding commencement week; and the first semester will close on the Friday preceding the opening of the second semester.

Regular college exercises will be suspended from 4 o'clock p. m. of the Wednesday preceding Christmas until 8 o'clock a. m. of the Tuesday following the first day of January; on Thanksgiving and the day following; on University day which is the twenty-second day of February; from 4 o'clock p. m. of the Friday preceding the first Monday in April until 8 o'clock a. m. of the Wednesday following the first Monday in April; and on Memorial Day.

FEES

THE COLLEGES

INCIDENTAL FEE.—A charge of fifteen dollars a year is made against all students, under the head of incidental expense. In the case of former students if this fee is not paid until the second day of the term one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

LABORATORY FEES.—Students in the laboratories and shops are required to pay fees to cover, in part, the cost of the material consumed, and the deterioration of the expensive instruments used by them. The fees charged per term in the laboratories mentioned below are as follows:

Agriculture, 6	$10 00
" 15	5 00
Anatomy and Physiology, 53, 54, 55, 56, 59, 60	7 50
" " (Vet. Medicine) 4	5 00
Botany, 4, 6, 7, 8, 6a	2 00
" 53, 55, 57, 58, 59, 60, 64	3 00
" 56 (half semester)	1 50
Ceramics, 1, 2, 3, 7, 8	1 50
" 9, 10, 11, 12	5 00
Chemistry, 8, 14, 16, 61b, 11, 18, per term $1 50, per semester	2 25
" 61a Lab	1 50
Domestic Science, 1, 2, 3, 4, 11, 12, 13	5 00
" " 5, 6, 7, 8, 9	1 00
Drawing, 7	2 00
Elec. Engineering, 4, 5, 4 or 5 hrs., $7.00; 3 hrs. or less	5 00
" ", 6 and 7 combination	5 00
Gymnasium, per term, $1.00; per semester	2 25
Law of Contracts (Engineering)	5 00
Law when elected 5 hours or less, per semester	7 50
Metallurgy, 3, 5, 6	1 50
Mechanical Engineering, 12, 13, 14, 15, 16, 17, 23, 24, 25	5 00
Pharmacy, 7, 8, 9, 10, 11, 15, 17, 18, 51	1 50
Pharmacy, 52	2 25
Physics, 5, 6, 7, 9, 3hrs., $5.00; over 3 hrs	7 00
Physics, 55, 56, 57, 58, 60, 3 hrs., $7.50; over 3 hrs	10 50
Shopwork, 4 hrs, or less	5 00
Shopwork, 5 hrs. or more	7 00

Zoology and Entomology, 53, 54, 55, 56, 61, 62	$7 50
Zoology and Entomology, 57, 58, 59, 60	4 50
Zoology and Entomology (Agriculture), 4, 7	1 00

The fees of the College of Law are $30 per semester, including the usual incidental fee.

In the laboratories of the Department of Chemistry and Agricultural Chemistry, each student is required at the beginning of each term to pay a fixed charge of one dollar and fifty cents for gas and water ($2.25 each semester). He is also required to buy his own supplies, as he needs them, at the general storeroom in Chemical Hall, where laboratory supplies are sold to students at first cost to the University.

All term dues must be paid at the opening of each term as a condition of admission to classes.

AUDITOR'S FEE

On presentation to the Bursar of the written consent of the head of a department, and on payment to the Bursar of an auditor's fee of one dollar, any person engaged in teaching is permitted to attend, in that department, any class or course (not to exceed three hours a week for one-half year) which is announced to be especially for teachers or those intending to teach.

GRADUATION FEE.—A fee of five dollars, to cover expense of graduation, diplomas, etc., is required of each person receiving one of the ordinary degrees from the University, and this fee must be paid before the degree is conferred. A like fee of ten dollars is charged to each person receiving one of the higher graduate degrees.

FREE SCHOLARSHIP IN AGRICULTURE AND DOMESTIC SCIENCE, AND IN VETERINARY MEDICINE.—A free scholarship, good for the two-year Courses, or for the First year of the Short Courses and the First year of the four-year Courses in the College of Agriculture and Domestic Science, is granted to one student annually from each county in Ohio. Each scholarship is valid two years from its grant, and covers the incidental fee and all laboratory fees (except gymnasium fee), but the person appointed to receive its benefits is subject to all the other conditions prescribed for admission to the Course. If in any county there is no applicant for the free scholarship in Agriculture, then a free scholarship, good for two years in the College of Veterinary Medicine, may be granted, subject to the same conditions as are prescribed for the free scholarship in Agriculture. The appointments are made by the county boards of agriculture, and are not transferable by the appointees. To learn whether the scholarship of a given county for the current year has been granted, inquiries should be addressed to the Secretary or President of the County Agricultural Society. For further information concerning these scholarships, inquiries should be addressed to the Dean of the College of Agriculture and Domestic Science.

THE COLLEGE OF LAW

INCIDENTAL FEE.—An incidental fee of fifteen dollars per year is charged to regular undergraduate students.

Upon payment of the incidental fee, law students will be admitted to all the privileges of all the other Colleges of the University, upon the same terms as to admission, discipline, character of studies selected, etc., as other students in the University.

TUITION FEE.—In addition to the incidental fee named above, a tuition fee of twenty-two dollars and fifty cents per semester is charged to regular undergraduate students.

GRADUATE FEE.—A graduate fee of fifteen dollars per semester, payable in advance, is charged to all who take the full graduate work.

DIPLOMA FEE.—A fee of five dollars (to cover the expense of graduation, diplomas, certificates, etc.,) is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred or certificate delivered.

Special students are required to arrange their fees satisfactorily with the Dean or Secretary before being admitted.

OTHER EXPENSES

There are two dormitories on the University grounds for the use of students. Each occupant is charged by the University a rent of a dollar and a half a term.

The South Dormitory affords unfurnished rooms to such students as desire to board themselves, and thus to reduce their expenses to a minimum. The expense of living in this way is about two dollars per week. Applications for rooms should be made to the President of the University.

The North Dormitory will accommodate more than sixty students. Board, furnished rooms, fuel, light and washing are, at present prices, supplied for about three dollars and fifty cents a week. Students will be admitted on special recommendation to the President of the University.

Boarding clubs are also formed in the neighborhood of the University. Furnished rooms are rented at seventy-five cents to one dollar a week for each student, and the cost of table board is two dollars to three dollars a week.

Board with furnished rooms can be obtained in private families, within convenient distances of the University, at rates varying from three and a half dollars to five dollars a week. The ruling rate may be taken as four dollars.

The uniform with which the members of the battalion are required to provide themselves costs (without overcoat) about fourteen dollars. It is quiet in pattern, and is designed to be worn daily in place of civilian dress.

The expenses of a student in the University for a year may be estimated as follows, excluding clothing (except uniform) and traveling expenses:

	Low	Average	High
Incidental fees	$15 00	$15 00	$15 00
Laboratory fees	15 00	20 00	54 00
Books and stationery	15 00	25 00	40 00
Room	4 50	37 00	75 00
Furniture	10 00		
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	$143 50	$221 00	$348 00

The second and third estimates for room include light, fuel and care. The third estimate is for a room occupied by a single student. The requirements for laboratory fees and books depend upon the course of study pursued.

SELF-SUPPORT

There is a large amount of work upon the University farm which is assigned to students, preference being given to those who are studying Agriculture. ***But the University cannot promise work to all applicants.*** Many students find work in private families, in offices, and in various occupations, by means of which they

defray at least a portion of their expenses. A person of ability and energy, who is master of a trade, or who can do good work of any kind, can generally find remunerative employment. It has seldom been known that any student of ordinary energy and industry was obliged to leave the University because of a lack of money for necessary expenses, *after having been say sixty days on the ground*—or long enough to inform himself as to the opportunities for securing employment. An employment bureau is maintained at the University, where the names of those seeking work and of those desiring workers are recorded.

For further information, address "Executive Office, State University, Columbus, Ohio."

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Furniture	10 00		
Board	70 00	110 00	150 00
Uniform	14 00	14 00	14 00
	$143 50	$221 00	$348 00

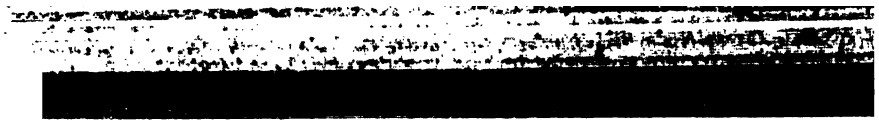
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SELF-SUPPORT

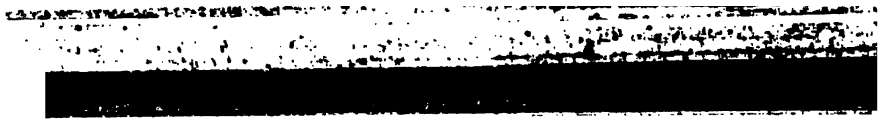
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For further information, address "Executive Office, State University, Columbus, Ohio."



THE COLLEGES



THE COLLEGES

ADMISSION

The University is open on equal terms to both sexes.

The entrance examinations for 1900 will be held on Monday and Tuesday, June 11 and 12, and on Monday and Tuesday, September 17 and 18. A part of the examinations may be taken in June and the remainder in September. Conditions incurred at the June examinations must be removed at the September examinations.

Applicants for admission to the Colleges of Agriculture, of Arts, Philosophy, and Science, or of Pharmacy, must be at least sixteen years of age; for admission to the College of Engineering or of Veterinary Medicine must be at least seventeen years of age; for admission to the College of Law must be at least eighteen years of age. Each must be provided with credentials of scholarship from his last instructor or from the last institution with which he has been connected, and with a certificate of good moral character.

There are three modes of admission to the University:

1. Certificates of the preparatory departments of Colleges of approved standing and of Normal schools in Ohio are accepted, if found satisfactory, in lieu of examination for preparatory studies, under the following conditions:

Each certificate must contain a detailed statement of the studies pursued, the text books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the applicant's rank or standing in it. A copy of the course of study should accompany the certificate; and both should be sent to the University not later than the first of September. *The University cannot promise this recognition to those certificates presented during entrance week.*

Blank certificates will be furnished on application.

Applicants for admission who come from other Colleges or Universities are required to bring certificates of honorable dismissal.

Teachers' certificates (in force) will be accepted at their face value.

2. From time to time the University approves the courses of study in certain High Schools of the State; and the graduates of these High Schools are admitted on certificates in accordance with following rules:

Rule 17. Upon request from the Board of Education or the Superintendent of Public Schools of any town in Ohio for the inspection of the High School, the Faculty shall appoint a committee of two of its own number to visit such school. This committee shall thoroughly inspect the school to ascertain whether its graduates may be reasonably supposed to possess the necessary qualifications for admission to the University. After such inspection, the committee shall report its conclusions in writing, with the reasons therefor, to the Faculty, which shall then decide by vote whether the graduates of the school shall be admitted without examination, such privilege, if granted, not to extend beyond the period of three years without re-examination of the school.

Rule 94. Such diplomas and certificates shall be accepted in lieu of examination for preparatory studies only under the following conditions:

(a) The certificate must state in detail the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination in it, and the rank or standing of the candidate in it.

(b) The certificate will be accepted for such studies only, or such part of each, as it shall show to have been satisfactorily accomplished.

(c) Every such certificate must be accompanied with a diploma showing that the candidate has completed the course of study in the school from which he comes. But the General Faculty may except from this condition schools whose work is known to be exceptionally good, provided that the candidate has attended the school two full years.

(d) In case the authorities of any high school, academy or normal school in Ohio desire to have a definite standing fixed for the admission of its graduates, a committee of the General Faculty will visit the school, and on the report of this committee a standing will be fixed for the graduates of the school. Such standing shall not be good, without re-examination, after three years.

(e) Whenever, after a sufficient trial, it becomes evident that the graduates of any school are not adequately prepared, the diploma and certificate of such school will no longer be accepted.

Rule 95. No applicant for admission to the University will be accepted who is deficient or conditioned in required entrance work representing in the aggregate more than one daily recitation for a year. In the case of candidates for admission to the College of Arts, Philosophy and Science, not more than two-thirds of this deficiency may be in any one subject; and in the case of candidates for admission to the College of Engineering, not more than one-third of this deficiency may be in mathematics.

3. All other applicants are subject to examination on the groups of study mentioned below under the headings of those Colleges and Courses in the University which they desire to enter.

Full equivalents for the text-books named will be accepted.

ADMISSION TO SPECIAL STUDIES

Students who desire to pursue special lines of work in any of the Colleges of the University, and do not desire to become candidates for degrees, will be admitted on the following conditions.

Rule 96. Students who desire to pursue special lines of work in the University, and do not desire to become candidates for degrees, will be admitted on the following conditions:

(a) The regular entrance examinations must be satisfied.

(b) But applicants who are not less than twenty-one years of age (eighteen years in the College of Engineering and of Pharmacy), after obtaining credit for the common English branches, may be excused from examination in such studies as may be deemed best by the Executive Committee of the appropriate college; provided, that if any such student afterwards becomes a candidate for a degree he shall pass the omitted examinations at least one year before the degree is conferred.

Rule 97. Students desiring to pursue special lines of work in the University shall, upon admission, lay before the Executive Committee of the appropriate college for approval or modification, a written statement of the end they have in view, the studies proposed for the attainment of that end, and the probable period of residence at the University. Such students shall be held as regularly to their

accepted schemes of work as are regular undergraduates to their prescribed courses of study. Admission will be refused to, or withdrawn from, all of whose definiteness of purpose the Executive Committee fail to receive satisfactory evidence.

ADMISSION TO ADVANCED STANDING

Rule 98. Applicants for advanced standing who do not come from some other university or college will be examined in the studies preparatory to admission to the appropriate college, and also in such undergraduate studies as they may wish to be credited with in advance. Applicants who have completed at least one years' work in an approved college, and who bring explicit and official certificates describing their courses of study and scholarship, and letters of honorable dismissal, will be admitted without examination, except such as may be necessary in order to determine what credit they are to receive for work done in the college from which they have come, and what courses of study they may with profit pursue in the University.

GRADUATION

Rule 99. No one will be admitted to candidacy for a degree at any Commencement who has not done the last year of work required for the degree, in residence at this University, and no student will be registered in such candidacy later than the first day of October.

Rule 128. Except by unanimous consent of the Faculty, no candidate for graduation will be recommended for a degree whose record is not in all respects complete by the Friday evening previous to the Commencement Day at which he seeks the degree; and all students shall be notified of this rule at the beginnig of their graduation year, and the rule (except the last clause) shall be printed in the annual catalogue.

Rule 137. No candidate for graduation will be permitted to register for the second term or semester of his graduating year except upon presentation to the Bursar, of the President's certificate that his thesis subject has been announced and approved.

XI. EXAMINATIONS AND STANDING

Rule 111. Students shall be regarded as strictly on probation until they have removed all deficiencies and conditions in entrance requirements.

Rule 112. Students who have any entrance conditions outstanding at the beginning of the third year of residence at the University will not be allowed to join their classes until such conditions have been removed.

Rule 116. The standing of students in each study shall be reported at the end of each term or semester, as "merit," "passed," "conditioned," or "failed." This standing shall be determined by the head of each department by such means and methods as he may choose, but no student shall be reported "failed" without having had the opportunity of a written examination.

Rule 117. The standings "merit" and "passed" indicate that the student has full credit for the term's or semester's work in the study in which this standing is obtained.

Rule 118. The report "credit" (K) shall be used only for work done in regular class at the University.

Rule 119. The standing "conditioned" indicates that credit for the term's or semester's work in the study in which the condition was incurred is withheld. In the following term the student shall be given an opportunity to obtain credit

by a special re-examination; or, if the study be a continuous one, the instructor in charge may, at his discretion, excuse the student from re-examination, and may allow him to obtain credit by pursuing the study successfully during the following term or semester. If the student thus excused from re-examination does not pass upon the work of the second term or semester, he shall be reported as "failed" in the work of both terms or semesters. Any condition that is not removed within one year from the beginning of the term or semester in which it was incurred shall lapse into a "failure."

Rule 120. The standing "failed" indicates that the student has obtained no credit whatever for the term's or semester's work in which the mark is given. The student must, at the first opportunity, repeat in class the study in which he has failed. But a student who has failed in an elective study may be excused from repeating such study by the Executive Committee of his college. In case of failure in any continuous study, the work of the term or semester in which the failure is incurred must be repeated in class before any subsequent term's or semester's work in that study can be commenced. Unexcused absence from any regular examination is construed as a failure therein.

Rule 121. Any student who fails at the end of any term or semester to secure full credit for two-thirds of his work shall be put on probation for the following term or semester with restricted work, and, if similarly delinquent in his studies at any time within the next ten academic months, shall thereby cease to be a member of the University.

Rule 122. If, for any cause, the preparation, progress or success of any student in the work assigned him be found unsatisfactory, the President may remove him from a class or dismiss him from the University.

ADMISSION TO GRADUATE WORK

Graduates of this or other institutions may, on application to the Faculty, enter the University and pursue such lines of work as may be arranged or approved by the appropriate collegiate committee. Such graduate students are subject to all the ordinary regulations (as to fees, attendance, etc.), prescribed for undergraduates.

IN THE COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING, LAW AND PHARMACY

Masters degrees are conferred upon graduates in Agriculture, Horticulture and Forestry, Engineering, Law and Pharmacy at the end of not less than one year's residence, which shall be wholly devoted to the completion of an approved course of study in the University. Each is required in addition to present an acceptable thesis upon some subject connected with his course of study.

IN THE COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory completion, during not less than one year of residence (devoted exclusively to such work), of an approved course of study, covering a major subject and an allied minor subject. The major subject (two-thirds) shall be graduate work, taken in one of the departments of the Arts, Philosophy and Science College. The minor subject (one-third) may be in graduate work.

2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject must be taken in one of the Departments of Science in the Arts, Philosophy and Science College. The minor subject must be in an allied Science.

3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence of a course of study in one or more of the departments of the College of Arts, Philosophy and Science, not less than one-third of which course must be graduate work and not more than two-thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of the College of Arts, Philosophy and Science. But a degree conferred under the provisions of this paragraph shall in no case be counted towards the degree of Doctor of Philosophy, or Doctor of Science.

4. With the consent of the Faculty the work of candidates for the Master's degree may be distributed over more than one year.

5. Each candidate for a Master's degree must also prepare and submit a thesis, and after its acceptance, be examined upon the work assigned him.

6. The degree of Ph. D. or of D. Sc. will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year or of the first two years, of the three, may be done at another University which offers equivalent graduate work.

7. Candidates for the degree of Doctor of Science must take their work wholly in Science.

8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

FELLOWSHIPS

To encourage graduates of this University, and of other similar and approved institutions in this state, to continue their work and to complete the courses necessary to second (and other) degrees, the University authorities have established fellowships in several departments. These demand about one-half of the time of the fellow for laboratory instruction or other similar assistance—as far as possible, along the line of his graduate study. The remainder of his time is given to graduate work. The fellowships pay from $250 to $300 for the University year.

Rule 151. So far as student work is concerned, Fellows shall be subject to the regulations of the various colleges in regard to graduate students.

Following are the fellowships for the academic year 1899-1900 as far as at present determined:

Anatomy and Physiology, Botany, Chemistry (two), American History and Political Science, Industrial Arts, Mathematics (two), Mechanical Engineering, Philosophy, Rhetoric and English Language, Veterinary Medicine.

In addition to these, Mr. Emerson McMillin has established two fellowships: one in Astronomy, $300 for the academic year; and one in Economics, $250 for the academic year. No service is required in these fellowships, and fellows are expected to give their entire time to their graduate work.

Correspondence should be directed to the Executive Office of the University.

PRIZES

Through the generosity of Hon. William J. Bryan an annual prize of fifteen dollars is offered for the best essay on the principles underlying the form of government of the United States. Competition for this prize is open to all students of the University.

The Edward Thompson Company offer annually to the student writing the best essay on a legal theme selected by the Faculty of the College of Law, the second edition of the English and American Encyclopedia of Law, which includes about thirty volumes.

Other prizes are offered in special departments, for which see department circulars or the heads of the departments

GENERAL RULES FOR STUDENTS

Rule 51. Each student shall at the beginning of the year give, in writing, his or her local address to the President, and shall promptly report all subsequent changes of address.

Rule 53. Smoking is prohibited in the halls, basements, and lecture rooms of the University buildings.

Rule 56. The rooms of University student organizations which are located in the University buildings shall not be used for purposes other than the usual exercises of such organization without the previously obtained consent of the General Faculty.

Rule 57. No arrangements or announcements shall be made by students for any public gathering or exercises in the University buildings without the previously obtained consent of the President.

Rule 66. All absences of individual students from the city, for any purpose, involving absence from college exercises, must be accounted for to the President; and in all possible cases permission must be previously obtained.

Rule 86. All students are required to register on the first day of each term or semester.

Rule 88. In the case of former students, if the incidental fee is not paid until the second day of the term or semester, one dollar will be added, and for each succeeding day of delinquency fifty cents will be added.

Rule 89. The assignment of work shall be made and recorded for each student, as shall be determined by the several faculties; but at the beginning of each term or semester, each student's card shall be signed by the Secretary of his College before presentation to the Bursar.

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

FOR ADMISSION

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following Books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar and Macbeth*; Milton's *Lycidas, Comus, L'Allegro,* and *Il Penseroso*; Burke's *Conciliation with the Colonies*; Macaulay's *Essays on Milton and Addison*; The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

3. *Algebra*—Venable's Easy Algebra, complete.

4. *Botany*—Gray or Kellerman's Elementary Botany and Spring Flora, or equivalent.

7. *Latin*—Pronunciation (the Roman method): Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico.*

Or *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good Modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German*—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages.)

Joynes's or Whitney's Reader, Hillern, Höher als die Kirche, Riehl, Der Fluch der Schönheit, Freytag, Die Verlorne Handschrift, Gerstäcker Irrfahrten.

Until the year 1902, the *German* or *French* required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

5. *Plane Geometry*—White, Venable, Wentworth, or Wells.
6. *Physics*—Gage, Carhart and Chute, Avery, or Appleton.
7. Either of the following:
 Civil Government—Fisk or Thorpe preferred.
 History—Myers's *General History.*

OUTLINE OF THE COURSE IN AGRICULTURE

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany and Vegetable Pathology.	5.
Drawing (10)	2.				
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
		Shopwork (1)	3.		
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).*		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
Horticulture (1) Elements.	4.	Shopwork (2)	3.	Horticulture (1) Plant Propagation.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (2) Economic Entomology.	4.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

* A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

THIRD YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Drawing (16)	3.
†French (1) Elementary, or †German (1) Elementary.	4.	†French (1) Elementary, or †German (1) Elementary.	4.	†French (1) Elementary, or †German (1) Elementary.	4.
Geology (2) General.	5.	Geology (5) General.	3.	Astronomy (3) Meteorology.	2.
Veterin'y Medicine (28)	5.	Veterin'y Medicine (29) General Pathology.	5.	Veterin'y Medicine (30) Special Pathology.	5.

FOURTH YEAR

REQUIRED

Agriculture (14) Animal Mechanics.	4.	Agriculture (15) Dairy.	4.	Agriculture (16) Rural Economics.	4.
History (5) U. S. Political.	4.	History (5) U. S. Political.	4-2.	Economics (2) Political Economy.	4.
		Economics (2) Political Economy.	4-2.		

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

OUTLINE OF THE COURSE IN HORTICULTURE AND FORESTRY

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	5.	Botany (7) Physiological Economic.	5.	Botany (8) Economic Botany. Vegetable Pathology.	3.
Drawing (10)	2.				
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
		Shopwork (1)	3.		
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.	Agr'l Chemistry (4) Laboratory.	5.
*French (1) Elementary, or *German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.
Horticulture (1) Elements.	4.	Shopwork (2)	3.	Horticulture (1) Plant Propagation.	4.
Physiology (1) Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.	Zoology (4) Economic Entomology.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

REQUIRED

Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
				Astronomy (3) Meteorology.	2.
				Drawing (16)	3.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.
General.					
Geology (2)	5.	Geology (5) General.	3.	Zoology (4) Economic Entomology.	3.
Horticulture (5) Varieties of Fruit.	4.	Horticulture (6) Principles of Fruit Culture.	4.	Horticulture (7) Small Fruits and Spraying.	4.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

FOURTH YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Horticulture (8) Elementary Floriculture	2.	Horticulture (9) Commercial Floriculture	2.	Horticulture (10) Home Floriculture.	2.
Horticulture (11) Arboriculture.	2.	Horticulture (12) Forestry and Sylviculture.	2.	Horticulture (13) Landscape Gardening.	2.
History (5) U. S. Political.	4.	History (5) U. S. Political.	4–2.	Economics (2) Political Economy.	4.
		Economics (2) Political Economy.	4–2.		

ELECTIVE

Ten hours a week through the year, including two hours for thesis, chosen from any of the courses given in any College of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

OUTLINE OF THE COURSE IN DOMESTIC SCIENCE

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Botany (6) Physiological.	3.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany. Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
Rhetoric (5) English Composition.	2½	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training.	

SECOND YEAR

REQUIRED

Agr'l Chemistry (4) Laboratory.*	5.	Agr'l Chemistry (4) Laboratory.*	5.	Physiology (3) Chemical Physiology.	3.
				Physiology (10)	2.
Domestic Economy (1)	4.	Domestic Economy (2)	4.	Domestic Economy (3)	4.
Drawing (10) Mechanical.	2.	Drawing (15) Architectural.	2.	Drawing (15) House Designing.	2.
†French (1) Elementary, or †German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.	French (1) Elementary, or German (1) Elementary.	4.
Physiology (1)	3.	Physiology (1)	3.	Physiology (1)	3.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training.	

THIRD YEAR

REQUIRED

Domestic Economy (4)	4.	Domestic Economy (5)	4.	Domestic Economy (6)	4.
French (2) or German (4)	4.	French (2) or German (4)	4.	French (2) or German (4)	4.
History (5) U. S. Political.	4.	History (5) U. S. Political.	4–2.	Economics (2) Political Economy.	4.
Education (1)	4.	Economics (2) Political Economy.	4–2.	English Literature (3)	4.
		Education (1)	4–2.		
		English Literature (2)	4–2.		

Elective: Two hours a week, through the year.

FOURTH YEAR

REQUIRED

Domestic Economy (7)	4.	Domestic Economy (8)	4.	Domestic Economy (9)	4.
Horticulture (8) Elements of Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.

* Specific laboratory work will be provided for students in this course, where necessary.

† Where credit is received for Elementary French or German, French (2) 4 hours or German (4) 4 hours is required.

ELECTIVE

Ten hours a week through the year chosen from any of the courses given in any college of the University upon which the student is qualified to enter; except in the College of Law.

THESIS

As a requisite for graduation each candidate must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

THE SHORT COURSES

A two-year course in Agriculture and a two-year course in Domestic Economy have been provided for those who have neither the time nor the means to pursue four-year courses. These short courses also enable those who lack the preparation for entering the four-year courses to obtain such preparation. The studies of the first year of the short courses, it will be noticed, nearly prepare the student to enter the first year of the four-year courses. The student having had chemistry in the first year of a short course can finish his preparation for either of the four-year courses during the first year of the latter course, in place of the chemistry required.

At the end of the first year of the Short Course in Agriculture, for example, the student has three strings to his bow. He may finish the second year of the short course by taking the more technical studies from the four-year courses, if lack of time or means demand it; or he may enter either the four-year course in Agriculture or the four-year course in Horticulture and Forestry. The same is practically true of the Short Course in Domestic Economy.

These short courses are not, of course, to be compared in breadth, strength, or thoroughness with the full courses of the University. They are far better preparation for the work to which they lead than no preparation; but all students are urged to take or to continue into the full four-year courses wherever possible.

ADMISSION TO THE SHORT COURSES IN AGRICULTURE AND DOMESTIC ECONOMY AND THE COURSE IN DAIRYING

Applicants must be at least fifteen years of age, and unless over twenty-one years of age must pass an examination in *Arithmetic*, *Geography*, *Grammar* and *United States History*, or bring High School or other certificates for those branches. Applicants who are over twenty-one are admitted without examination.

OUTLINE OF THE SHORT COURSE IN AGRICULTURE

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Mathematics (1) Algebra.	5.	Mathematics (3) Geometry.	5.	Botany (1) Elementary.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physiography.	5.
Drawing (10) Mechanical.	2.	Shopwork (1)	3.	Physiology (2) General.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Not less than fifteen hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Principles of Breeding.	4.	Agriculture (10) Stock Feeding.	4.
Agriculture (11) Farm Equipment.	4.	Agriculture (12) Soils.	4.	Agriculture (13) Crops.	4.
Agriculture (17) Milk Sanitation.	3.				
Botany (6) Physiological.	5.	Agriculture (15) Dairy.	4.	Zoology (7) Entomology.	3.
Horticulture (1) Elements.	4.	Horticulture (1) Greenhouse Construction.	4.	Horticulture (1) Plant Propagation.	4.
		Shopwork (2)	3.		
Veterinary Medicine (28) Anatomy.	5.	Veterinary Medicine (29) General Pathology.	5.	Veterinary Medicine (30) Special Pathology.	5.
Horticulture (5) Varieties of Fruit.	4.	Horticulture (6) Principles of Fruit Culture.	4.	Horticulture (7) Small Fruits and Spraying.	4.
		Physiology (6)	2.		
Cadet Service.		Cadet Service.		Cadet Service.	

COURSE IN DAIRYING

The course in dairying begins each year on the Wednesday following the first day of January, and continues during the entire term. Butter-making, as practiced in the farm dairy and in the creamery, is thoroughly taught. The student performs all necessary operations in the manufacture of butter by these two methods, under the guidance of the instructors. In cheese-making the principles are taught, with elementary practice.

Agriculture (5). Dairy Farming.—Three hours each week. Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms.

Agriculture (6). Butter and Cheese-making.—Four half days each week. Laboratory practice in running separator, churning, working butter, making cheese, milk testing, etc.

Agriculture (7). Butter and Cheese-making.—Two hours each week. Lectures and recitations.

Agricultural Chemistry (7). Milk Chemistry and Milk Testing.—Two hours each week. Lectures and laboratory practice.

Physiology (6). Bacteria in their relation to Milk, Butter and Cheese.—Two hours each week. Lectures and laboratory practice.

Veterinary Medicine (17). Diseases of the Cow.—Three hours each week.

Mehanical Engineering (26). Steam Machinery.—One hour each week.

SHORT COURSE IN DOMESTIC SCIENCE

FIRST YEAR

REQUIRED

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Botany (1) Elementary.	5.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.	Rhetoric (5) English Composition.	2½.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training.	

SECOND YEAR

REQUIRED

Domestic Economy (1)	4.	Domestic Economy (2)	4.	Domestic Economy (3)	4.
Domestic Economy (4)	4.	Domestic Economy (5)	4.	Domestic Economy (6)	4.
Hygiene and Physical Training.		Hygiene and Physical Training.		Hygiene and Physical Training.	

ELECTIVE

Not less than seven hours per week through the year; chosen from any of the following courses subject to conditions named under "Departments of Instruction."

Botany (6) Physiological.	5.	Botany (7) Physiological and Economic.	5.	Botany (8) Economic Botany. Vegetable Pathology.	5.
Drawing (1)	2.	Drawing (1)	2.	Drawing (1)	2.
Education (1)	4.	Education (1)	4-2.	English Literature (2)	4.
		English Literature (2)	4-2.		
Horticulture (8) General Floriculture.	2.	Horticulture (9) Commercial Floriculture.	2.	Horticulture (10) Home Floriculture.	2.
Zoology (1) Invertebrate.	3.	Zoology (1) Invertebrate.	3.	Zoology (1) Vertebrate.	3.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FOR ADMISSION TO THE COURSE IN ARTS[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth;* Milton's *Lycidas, Comus, L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

3. *Algebra*—Taylor's Academic or equivalent.

4. *Botany*—Kellerman's Elementary Botany and Spring Flora or equivalent.

5. *Civil Government*—Fiske or Thorpe preferred.

6. *Geometry, Plane and Solid*—Venable, White, Wentworth or Wells.

7. *Greek*—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first three books of Xenophon's *Anabasis.* At least two years should be devoted to this work.

8. *History*—Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.

9. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Aeneid,* with Prosody; Prose Composition, Daniell or Collar or Jones or Dodge and Tuttle, entire.

10. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.

For the present, the *Greek* required for admission may be begun at the University, but without University credits.

TO THE LATIN COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Course in Arts; except that instead of *Greek*, the applicant must offer *French* or *German*, as follows:

French.—The requirements under this head are those of the elementary course or grade of preparatory instruction, as formulated in the "Report of the Committee of Twelve of the Modern Language Association of America," and are here stated in the terms of that report.

Applicants should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

Two years should be given to this preparation.

During the first year the work should comprise: (1) Careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

During the second year the work should comprise: (1) The reading of from 250 to 400 pages of easy modern (nineteenth century) prose in the form of stories, plays or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read: (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

German —

(a) The Aim of the Instruction.

At the end of the elementary course in German the pupil should be able to read at sight, and to translate, if called upon, by way of proving his ability to read, a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions; to put into German short English sentences taken from the language of every-day life or based upon the text given for translation, and to answer questions upon the rudiments of grammar as defined below.

(b) The Work to be Done.

During the first year the work should comprise: (1) Careful drill upon pronunciations; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of every-day life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the model auxiliaries, and the elementary rules of syntax and word-order; (4) abundant easy exercises.

designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

During the second year the work should comprise: (1) The reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use his knowledge with facility in the formation of sentences, and, secondly, to state his knowledge correctly in the technical language of grammar.

Until the year 1902, the *German* or *French* required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

TO THE MODERN LANGUAGE COURSE IN PHILOSOPHY

The requirements are the same as for admission to the course in Arts; except that instead of *Latin* and *Greek*, the applicant may offer *Latin* and *French*, or *Latin* and *German*, or *French* and *German*, in the amounts specified above.

Until the year 1902, either the *French* or the *German* (but not both), required for admission may be begun at the University, but without University credits. For the year 1902, and thereafter, the full requirements as above stated will be maintained.

TO THE ENGLISH COURSE IN PHILOSOPHY

The requirements are the same as for admission to the Modern Language Course in Philosophy. But in place of one of the foreign languages the applicant may offer the following group:

1. *Chemistry*—Williams or Remsen.
2. *English Literature*—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, *English History*— Montgomery.
3. *Physiology*—Martin (briefer course).

Until the year 1902, one modern language required for admission may be begun at the University, but without University credits. For the year 1902, and thereafter, the full requirements as stated above will be held to.

TO THE COURSE IN COMMERCE AND ADMINISTRATION

The requirements are the same as for admission to the Modern Language Course in Philosophy.

TO THE COURSE IN SCIENCE

The requirements are the same as for admission to the Modern Language Course in Philosophy.

TO GRADUATE WORK

1. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. from this University or from other institutions making equivalent requirements for those degrees, upon the satisfactory completion, during not less than one year of residence (devoted exclusively to such work), of an

approved course of study, covering a major subject and an allied minor subject. The major subject (two–thirds) shall be graduate work, taken in one of the departments of this (the Arts, Philosophy and Science) College. The minor subject (one–third) may be in graduate work.

2. The degree of Master of Science will be conferred upon candidates holding the degree of B. Sc. from the General Science Course of this University, or from institutions making equivalent requirements for this degree, and also upon graduates from the College of Engineering of this University, upon the terms specified for the degree of Master of Arts; except that the major subject shall be taken in one of the Departments of Science in this (the Arts, Philosophy and Science) College. The minor subject shall be in an allied Science.

3. The degree of Master of Arts will be conferred upon candidates holding the degree of B. A. or B. Ph. and the degree of Master of Science upon candidates holding the degree of B. Sc. from this University, or from other institutions making equivalent requirements for these degrees, and the degree of Master of Science will be conferred on graduates from the College of Engineering of this University, on the completion, during not less than one year of residence, of a course of study in one or more of the departments of this College, not less than one–third of which course shall be graduate work and not more than two–thirds may be such undergraduate work as is announced to be elective, such course to be subject to the approval of the Executive Committee of the Faculty of this College. But a degree conferred under the provisions of this paragraph shall in no case be counted towards the degree of Doctor of Philosophy, or Doctor of Science.

4. With the consent of the Faculty the work of candidates for Master's degree may be distributed over more than one year.

5. Each candidate for a Master's degree must also prepare and submit a thesis, and, after its acceptance, be examined upon the work assigned him. The regulations as to undergraduate theses apply to theses for Master's degree also.

6. The degree of Ph. D., or of D. Sc., will be conferred upon holders of the appropriate baccalaureate degree from this University, or from other institutions making equivalent requirements for the first degree, upon the satisfactory completion of three years of resident graduate work in the Arts, Philosophy and Science College, including thesis and examinations. Holders of the degree of Master of Arts or Master of Science from this University, under the conditions prescribed in paragraph one or two, or from other institutions making equivalent requirements for these degrees, may receive the Doctor's degree on the satisfactory completion of two years of resident graduate work after obtaining the Master's degree. On approval of the Faculty, the work of the first year, or of the first two years, of the three, may be done at another University which offers equivalent graduate work.

7. Candidates for the degree of Doctor of Science shall take their work wholly in Science.

8. With the consent of the Faculty the work required of candidates for Doctor's degrees may be distributed over more than three years.

COURSE IN ARTS

Degree: Bachelor of Arts

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek (51) Xenophon.	4.	Greek (52) Herodotus, Homer.	4.
Latin (51) Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Composition.	2½	Rhetoric (52) Composition.	2½.
Cadet Service (men).*		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Greek (53) Lysias.	4.	Greek (54) Homer, Plato.	4.
†History (55) United States or †Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
*Major Study	4.	Major Study	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College (See "The Departments," page 119); *except* that, not earlier than the third

* A rule of the Board of Trustees requires each male student (except students in the College of Law) to render two years' cadet service as a condition of graduation. Students physically incapacitated for cadet service will be assigned an equivalent in special gymnasium work. The President has authority to excuse from cadet service under certain conditions.

Young women are required to carry Hygiene and Physical Training in place of cadet service.

year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

*Major Study	5.	Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

LATIN COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary, or (55) or German (51) Elementary, or (55)	4.	French (52) Prose and Plays or German (52) Elementary, or (56)	4.
Latin (51) Cato, Cicero.	4.	Latin (52) Livy, Horace.	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52) Comparative Zoology.	3.

* Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

SECOND YEAR.

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Latin (53) Horace, Pliny.	4.	Latin (54) Tacitus, Juvenal.	4.
*English Literature (51) Introductory.	4.	Rhetoric (54) Analysis of Prose.	4.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
†Major Study	4.	Major Study	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR

†Major Study	6.	†Major Study	6.
Electives (as in third years)	10.	Electives (as in third year)	10.

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

* The subject not taken the first semester, to be taken the second semester.

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

MODERN LANGUAGE COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) or (55)	4.	French (52) or (56)	4.
German (51) or (55)	4.	German (52) or (56)	4.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative Zoology.	3.	Zoology (52). Comparative.	

SECOND YEAR.

French	4.	French	4.
German	4.	German	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52). Introductory.	
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR.

Philosophy (51) Psychology.	4.	Philosophy (52) Logic and Ethics.	4.
†Major Study	4.	†Major Study	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

* The subject not taken the first semester, to be taken the second semester.

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

FOURTH YEAR.

First Semester	Credit hours	Second Semester	Credit hours
†Major Study	5.	†Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

ENGLISH COURSE IN PHILOSOPHY

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
History (151) European.	3.	History (152) European.	3.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Rhetoric and English Language (69) History of English.	2.	Rhetoric and English Language (70) Development of Prose.	2.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
Botany (55) Systematic and Physiological.	4.	Zoology (64) Comparative.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative.	3.	Zoology (52) Comparative.	3.

* Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

SECOND YEAR.

First Semester	Credit hours	Second Semester	Credit hours
French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
Philosophy (53)	3.	Philosophy (54)	3.
Rhetoric (53) Analysis of Prose.	4.	English Literature (52) Introductory.	4.
Rhetoric and English Language (71) Old English.	2.	Rhetoric and English Language (72) Old English.	2.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR.

Philosophy (55)	3.	Philosophy (56)	3.
†Major Study	4.	Major Study	4.

ELECTIVE

Eight hours a week through the year—chosen from the courses in this College, *except* that, not earlier than the third year, studies equivalent to five hours a week for one year may be chosen from any course or courses taught in the University; provided that the studies chosen are such as the student is qualified to pursue.

FOURTH YEAR.

Major Study	5.	Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

* The subject not taken the first semester, to be taken the second semester.

COURSE IN COMMERCE AND ADMINISTRATION

Degree: Bachelor of Philosophy

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
French (51) Elementary.	4.	French (52) Prose and plays.	4.
German (51) Elementary.	4.	German (52) Elementary.	4.
History (151) European.	3.	History (152) European.	3.
Mathematics (67) Algebra, Analytics, Calculus.	3.	Mathematics (68) Trigonometry, Analytics, Calculus.	3.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR.

French (55) Modern Literature or German (55) Literature.	4.	French (56) Modern Literature or German (56) Lyrics.	4.
*History (55) United States or *Economics (51) Elementary.	4.	Economics (52) Elementary or History (56) United States.	4.
History (153) England.	3.	History (154) England.	3.
Rhetoric (5) Analysis of Prose.	4.	English Literature (52) Introductory.	4.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

One of the following (the choice being for the year):

Botany (51) or (57)	3.	Botany (52) or (58)	3.
General Chemistry (51) Inorganic.	3.	General Chemistry (52) Inorganic.	3.
Physics (51) or (53) Mechanics, Heat, etc.	3.	Physics (52) or (54) Electricity, Magnetism, etc.	3.
Zoology (51) Comparative.		Zoology (52) Comparative.	3.

THIRD YEAR.

†Elementary Law	6.	†Contracts	4.
Philosophy (51)	4.	Philosophy (52)	4.
‡Major Study	4.	‡Major Study	4.

ELECTIVE

From the courses mentioned in the departments below, selection may be made to make up the required number of hours. Not less than sixteen nor more than

* The subject not taken the first semester, to be taken the second semester.

† In place of Elementary Law six hours; Commercial Law four hours and Corporations (Private and Municipal) two hours may be substituted. Also in place of Contracts, four hours, any two of the following may be substituted; Corporations (Private), Insurance, Agency, Sales, Mortgages.

‡ See note page 79.

eighteen hours a week are permitted and no substitutions or options further than those indicated below.

First Semester	Credit hours	Second Semester	Credit hours
Economics	2 or 3.	Economics	2 or 3.
German	2 or 3.	German	2 or 3.
History	2 or 3.	History	2 or 3.
Political Science	2 or 3.	Political Science	2 or 3.
Rhetoric (57)	3.	Rhetoric (58)	3.
Romance Language	2 or 3.	Romance Language	2 or 3.

FOURTH YEAR.

†Major Study	5.	†Major Study	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

At the beginning of the Senior year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the fifteenth day of December of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

No one will be admitted to candidacy for a degree later than the first day of October of his last year.

COURSE IN GENERAL SCIENCE

Degree: *Bachelor of Science*

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Botany (51) Elementary or Zoology (51) Comparative.	3.	Botany (52) Morphology and Classification or Zoology (52) Comparative.	3.
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Elementary.	4.
Chemistry (51) Inorganic.	3.	Chemistry (52) Inorganic.	3.
*Mathematics (67), (65) Algebra, Analytics, Calculus or Mathematics (55), (57) Trigonometry and Algebra.	4. or 5.	*Mathematics (68), (66) Trigonometry, Analytics, Calculus. or Mathematics (56), (58) Algebra and Analytics.	4. or 5.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

† Major Study. Not later than the beginning of the Third Year, each student shall elect a Major Study in one department or with the consent of the professors in charge, in two allied departments in this college. To the Major Study he shall devote not less than four nor more than ten hours a week during the third year, and not less than five nor more than ten hours the fourth year. With the approval of the proper authority, the Major Study may be entered upon in the second year; an equivalent amount of the required work of that year, not in the line of the Major Study, being postponed to the third year; but the amount so postponed shall not exceed four hours a week. In this case, the elective work of the third year will be reduced by a like amount.

* Students taking both Botany 51 and 52 and Zoology 51 and 52 will take Mathematics 67 and 68 as the required Freshman Mathematics.

SECOND YEAR

First Semester	Credit hours	Second Semester	Credit hours
Economics (51) Political Economy.	4.	Rhetoric (54) Analysis of Prose.	4.
‡French or ‡German	4.	French or German	4.
Physics (51) Mechanics, Heat, etc.	3.	Physics (52) Electricity, Magnetism, etc.	3.
Physiology (51) Human Anatomy.	3.	Physiology (52) Physiology.	3.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

Together with one of the following subjects, to be continued through the year:

(a) Botany (57), (58), each three hours credit or (59), (60), each five hours' credit for a semester. (b) General Chemistry (53), (54), each five hours' credit. (c) Mathematics (59), (61), (60), (62), each five hours' credit for a semester. (d) Zoology (53), (54), each three hours' credit, or (55), (56), each five hours' credit.

THIRD YEAR

Geology (61) and Astronomy (61) General or ‡French or German	3. 2. 4.	Geology (62) and **Astronomy (62) General or **Astronomy (54) Mathematical.	3. 2. 5.
Philosophy (53)	3.	Philosophy (54)	3.
*Major Study	4.	Major Study	4.

Elective: Four hours a week through the year—chosen from the courses in this College, *except* that not earlier than the third year:

First: Studies equivalent to five hours a week for one year may be chosen from any courses taught in the University; provided, that the studies chosen are such as the student is qualified to pursue.

Second: Additional studies equivalent to five hours a week for one year may be chosen in the College of Engineering.

FOURTH YEAR.

Major Study (as in third year)	5.	Major Study (as in third year)	5.
Electives (as in third year)	10.	Electives (as in third year)	10.

THESIS

As a requisite for graduation each student must present an acceptable thesis embodying the results of a special research. The line of research must lie within

‡ It is desired that the student on completing this course, shall possess a good reading knowledge of both French and German. Therefore, the student entering on both French and German will take both languages in the University, each for one year. He who enters on one Modern Language will continue that language one year in case he cannot read easy prose at sight and take the other language for one year. In case a reading knowledge of one Modern Language is possessed, the student will take the other language two years. The third year of Language in the case of students making the Mathematics a specialty will be that language of which the student has the less knowledge.

** Students who elect Mathematics as their Major Study shall, in the Third Year, take French or German four hours the first semester and Astronomy five hours the second semester.

* Major Study. Not later than the beginning of the Third Year each student in this course shall elect a Major Study in Mathematics or in a Science in which Laboratory instruction is given. This Major Study shall be in one department, or with the consent of the professors in charge in two allied departments in this college. To the Major Study the student shall devote not less than five not more than ten hours a week during the Fourth Year.

the field of the major study, and is subject to the approval of the professor or professors having the major study in charge; and the student shall enter on this work not later than the beginning of the Senior year, and shall devote to it not less than two hours a week, or its equivalent, for one year, independently of his other work. The subject of thesis, together with a written approval of it by the professor or professors directing the investigation, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day. In case two or more students are pursuing the same major study, a joint research and thesis may be made.

THE SPECIAL COURSES

COURSE PREPARATORY TO LAW AND TO JOURNALISM

FOR ADMISSION

The requirements for admission to any of the four year courses in the College of Arts, Philosophy and Science; except that the applicant must not be less than eighteen years of age.

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
English Literature (51) Introductory.	4.	Economics (52) Elementary.	4.
French (51) Elementary or German (51) Elementary.	4.	French (52) Prose and Plays or German (52) Prose and Plays.	4.
History (151) European.	3.	History (152) European.	3.
Rhetoric (51) Composition.	2½.	Rhetoric (52) Composition.	2½.
Science, Elective	3.	Science, Elective	3.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

Economics (55) Practical Problems.	2.	Economics (56) Industrial Reforms.	2.
English Literature Elective.	2 or 3.	English Literature Elective.	2 or 3.
European History (153) England.	3.	European History (154) England.	3.
American History (55) United States.	4.	Rhetoric (54) Analysis and Prose.	4.
Philosophy (53) Psychology.	3.	Philosophy (54) Logic.	3.
Rhetoric (55) Newspaper work.	1.	Rhetoric (56) Newspaper work.	1.
Rhetoric (69) History of English.	2.	Rhetoric (70) Development of Prose.	2.
Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

Note — A student desiring to continue French or German may substitute French (55 and 56), or German (55 and 56), for four hours of the studies of the second year. The studies thus deferred must be taken in the third year.

THIRD YEAR.

Not less than sixteen nor more than seventeen hours a week, including studies deferred from the second year; selections to be made from the following, subject to the conditions named in the "Departments of Instruction." In view of the fact that this is a special course for special purposes, no substitutions or options further than those indicated below, will be permitted.

First Semester	Credit hours	Second Semester	Credit hours
American History (63), (65)	2.	American History (64), (66)	3.
Economics (53), (57), (59)	2.	Economics (54), (58), (60)	2.
English Literature	2 or 3.	English Literature	2 or 3.
European History (155), (157), (161)	2.	European History (156), (158), (162)	2.
Education (57)	2.	Education (54)	2.
Philosophy (55) Ethics.	3.	Philosophy (56) Modern.	3.
Political Science (51), (55)	2.	Political Science (52), (56)	2.
Political Science (53)	3.	Political Science (54)	3.
Rhetoric (57), (69), (75)	3.	Rhetoric (58), (70), (76)	3.
Rhetoric (59)	2.	Rhetoric (60)	2.

COURSE PREPARATORY TO THE STUDY OF MEDICINE

The three-year course preparatory to the study of Medicine has been discontinued owing to the fact that the completion of this course would not, under the present requirements of the Association of Medical Colleges, enable the student to gain credit for a year's time in the medical course. While it is deemed wiser for the present not to offer a special four-year course leading to a degree, it is desired to point out that a student having a medical career in view when entering here, or determining on such a career within the first year or two of his university course, may make such elections in any of the general courses as to gain a full year's credit, both in work and time allowance in a medical college.

While studies differ in different medical curricula it may be noted that Chemistry, Zoology, Comparative Anatomy, Embryology, Histology, Physiology, Bacteriology and Materia Medica, as taught here will be accepted in the medical schools and election of these in their proper sequence will enable the student to qualify himself very thoroughly for his medical course.

Students having medicine in view will do well to consult with the professors having these studies in charge, with reference to the best sequence of election and those having a particular medical college in view can make their selections with special reference to its requirements. Students already entered in the Course Preparatory to the Study of Medicine may complete the work as arranged at the time of their entrance.

THE COLLEGE OF ENGINEERING

FOR ADMISSION TO THE FOUR-YEAR COURSES, AND TO THE COURSE IN ARCHITECTURE

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar*, and *Macbeth;* Milton's *Lycidas, Comus, L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

3. *Algebra*—Taylor's Academic or equivalent.
4. *Civil Government*—Fiske or Thorpe preferred.
5. *Geometry, Plane and Solid*—Venable, Wentworth, White, or Wells.
6. *History*—Myers's General History.
7. *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential), Cæsar, the first four books of the *De Bello Gallico.*

Or *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French and to translate correctly into French simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The text read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

Or *German*—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declen-

sions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages): Joynes's or Whitney's Reader, Hillern's Höher als die Kirche, Riehl's Der Fluch der Schönheit, Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

Until the year 1902, the *German* or *French* required for admission may be begun at the University, but without University credits. For the year 1902 and thereafter, the full requirements as above stated will be held to.

8. *Physics*—Gage, Carhart and Chute, Avery or Appleton, complete.

Note — An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

No student will be admitted to the College of Engineering who is in arrears more than fifteen hours, of which not more than five hours may be in Mathematics.

COURSE IN CIVIL ENGINEERING

This course is arranged for students expecting to become surveyors or civil engineers. The plan of the course is to give (1) a thorough training in mathematics and mechanics, (2) the general principles underlying all branches of civil engineering, (3) the application of the general principles to the several branches of civil engineering. The subjects of land, railroad and topographical surveying are important features, and students can at once begin practical work. In the engineering work special attention is given to iron and steel bridge work, masonry construction and cement testing, road and railroad building and maintenance, water supply and the subject of the collection and disposal of sewage.

FIRST YEAR

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.			

SECOND YEAR

Civil Engineering (1) Surveying.	6.	Civil Engineering (4) C. E. Drawing.	4.	Civil Engineering (2) Surveying.	6.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	5.	Drawing (3) Shades, Shadows & Per.	3.
Mathematics (18) Space Analysis.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SUMMER COURSE

Civil Engineering (22). Four weeks — six days per week. Field work in land and railroad surveying.

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Civil Engineering (3) Topog. Surveying.	4.	Civil Engineering (24) C. E. Drawing.	5.	Astronomy (6) Mathematical.	4.
Civil Engineering (16) Roads and Streets.	5.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (7) Bridge Stresses.	5.
Astronomy (4) Mathematical.	3.	Astronomy (5) Mathematical.	3.	Drawing (7) Photography.	2.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

SUMMER COURSE

Civil Engineering (23). Four weeks — six days per week. Field work in railroad and topographical surveying.

FOURTH YEAR

Civil Engineering (8) Bridge Designing.	5.	Civil Engineering (17) Railways.	5.	Civil Engineering (18) Water Supply.	5.
Civil Engineering (15) Masonry.	5.	Civil Engineering (14) Cement Testing.	2.	Civil Engineering (10) Sanitary Engineering.	5.
Elec. Engineering. Lectures (6)	2.	Elec. Engineering. Lectures (6)	2.		
		Laboratory (7)	2.		
		Mech. Engineering (17) Laboratory.	3.	Mech. Engineering (35) Laboratory.	5.
Geology (5) General.	5.	Geology (6) Economic.	3.		

*VOLUNTARY

*French (3), two hours; or German (2), two hours; or Rhetoric (4), two hours; each for the year.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Civil Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MINE ENGINEERING

This Course is arranged for students intending to become mining engineers and surveyors, metallurgical or technical chemists. The plan of work, therefore, while keeping mathematics, drawing and engineering prominent, also provides extended work in applied chemistry, chemical analysis, assaying, mineralogy, geology, and surveying with especial application to mines and underground work, while the treatment of ores, both mechanical in ore dressing and chemical in metallurgy, forms an important feature.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	2.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades & Shadows.	3.
Mathematics (18) Space Analytics.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.	Metallurgy (5) Laboratory.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Shopwork (7) Woodwork.	2.	Shopwork (11) Forging.	2.	Shopwork (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.			

VOLUNTARY

French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	5.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel, Copper, Gold, etc.	5.	Civil Engineering (19) Truss Stresses.	5.
Mine Engineering (4) Mine Surveying.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (3) Deter. Mineralogy.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

FOURTH YEAR

Elec. Engineering. Lectures (6)	2.	Elec. Engineering. Lectures (6)	2.	Mech. Engineering (3) Plans and Specifications.	5.
Laboratory (7)	2.	Laboratory (7)	2.		
Geology (5) General.	5.	Geology (6) Economic.	3.	Mine Engineering (6) Plans and Specifications.	5.
Mine Engineering (5) Mine Engineering.	5.	Metallurgy (7) Metal. Construction.	3.	Mine Engineering (5) Mine Engineering.	5.
Metallurgy (8) Ore Dressing.	2.	Mine Engineering (5) Mine Engineering.	5.	Drawing (7) Photography.	2.
		Geology (7) Petrography.	2.		

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Metallurgy or of Mine Engineering. The subject must be

announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN MECHANICAL ENGINEERING

This Course has for its object the qualifying of men for the mechanical engineering profession. It aims to embrace preparation for such lines of pursuit as the successful management of machinery in manufacturing establishments; the superintendence of construction; the designing and laying out of machinery plants for mills and factories; the construction of machines for particular purposes, and the designing and drawing of the same, the making of calculations respecting strength, shocks, proportion, endurance, and suitability of material for specific purposes.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shopwork (7) Carpentry and Pattern Making.	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mechanics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descr. Geometry.	3.	Drawing (3) Shades & Shadows.	3.
Mathematics (18) Space Analytics.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (11) Forging.	3.	Physics (7) Laboratory.	2.	Physics (7) Laboratory.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (3) Foundry.	2.	Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine Work.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

VOLUNTARY

French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (5) Technical.	3.	Mech. Engineering (6) Mechanics.	5.	Drawing (7) Photography.	2.
Mathematics (11) Differential Equations.	1.	Mech. Engineering (22) Timber and Masonry.	3.	Civil Engineering (19) Truss Stresses.	5.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (3) Mechanism.	5.	Mech. Engineering (7) Strength Materials.	5.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel.	2.		
Shopwork (14) Machine Work.	3.	Shopwork (15) Advanced Machine Work.	4.	Mech. Engineering (3) Mechanism.	2.
Mech. Engineering (12) Laboratory.	2.			Mech. Engineering (33) Power Plants.	5.

FOURTH YEAR

Elec. Engineering.		Elec. Engineering.		Industrial Arts (5) Shop Appliances.	3.
Lectures (6)	2.	Lectures (6)	2.		
Laboratory (7)	2.	Laboratory (7)	2.		
Mech. Engineering (27) Laboratory.	5.			Mech. Engineering (19) Machine Design.	5.
Mech. Engineering (33) Engines & Boilers.	5.	Mech. Engineering (34) Thermodynamics.	5.	Mech. Engineering (15) Laboratory.	3.
		Mech. Engineering (14) Laboratory.	4.	Mech. Engineering (31) Hydraulic Mach.	3.
Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (18) Mach. Design.	5.	Mech. Engineering (21) Thesis Work.	5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of such study must lie within the field of Mechanical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ELECTRICAL ENGINEERING

The object of this Course is to prepare students for the various pursuits in which the applications of electricity are prominent. Physics, especially theoretical and applied electricity, and mechanical engineering are naturally the leading subjects of the Course. General theory is treated in ample breadth, and is tested by experiments in well equipped laboratories. The laboratories are so conducted as to afford the student a degree of facility in the use of instruments and machinery only acquired by continued practice.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
French (1) or German (1)	4.	French (1) or German (1)	4.	French (1) or German (1)	4.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shopwork (7) Carpentry & Pattern Making.	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shade & Shadows.	3.
Mathematics (18) Space Analytics.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (11) Forging.	2.			Physics (5) Laboratory.	4.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Shopwork (4) Chipping and Filing.	2.	Shopwork (13) Machine Work.	3.		
Cadet Service.		Cadet Service.		Cadet Service.	
		VOLUNTARY			
French (3)	2.	or German (2) Each for the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Drawing (5) Technical.	3.	Mech. Engineering (3) Mechanism.	5.	Industrial Arts (7) Machine Design.	3.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (28) Laboratory.	2.
Physics (6) Laboratory.	3.	Physics (6) Laboratory.	5.	Mech. Engineering (7) Strength Materials.	5.
Physics (4) Electricity & Magnetism.	3.	Elec. Engineering (8) D. C. Machine.	4.	Mech. Engineering (32) Power Plants.	5.
Shopwork (14) Machine Work.	3.			Elec. Engineering (9) Laboratory.	4.

FOURTH YEAR

Elec. Engineering (10) Alt. Current. Mach.	3.	Elec. Engineering (10) Alt. Current Mach.	3.	Elec. Engineering (13) Applications.	5.
Elec. Engineering (11) Laboratory.	3.	Elec. Engineering (14) Designing.	4.	Elec. Engineering (14) Designing.	4.
Mech. Engineering (4) Laboratory.	5.	Elec. Engineering (11) Laboratory.	3.	Elec. Engineering (4) Laboratory and Thesis.	5.
Mech. Engineering (8) Engines & Boilers.	5.	Elec. Engineering (9) Transmission.	5.		
*Elective	3-5.	*Elective	3-5.	*Elective	3-5.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the result of a special study. The subject of such study must lie within the field of Electrical Engineering. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department) not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CERAMICS

This course is designed to create a class of engineers who shall be fitted to render to the Clay, Glass and Cement Industries the same kind of services which

* Subject to the approval of the Professor of Electrical Engineering.

have long been rendered to Mining and Metallurgical Industries by graduates of Schools of Mines.

The problems of the Ceramic Industries are not unlike those of the Mining Industries, either in kind or in adaptation to methods of technical control; but the information and scientific equipment necessary to solve these problems successfully are peculiar to those industries alone, and in the past have received little or no attention from technical schools in this country.

This course is offered with the hope of filling this long standing gap in the scheme of engineering education in this country. It is essentially an Engineering Course, following closely the lines of the other engineering courses, up to the end of the second year. In the last two years, the training specializes along the lines of Ceramic and of the application of Chemistry to this subject.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Shopwork (7) Carpentering & Pattern Making.	4.
German (1) or (4)	4.	German (1) or (4)	4.	German (1) or French (1)	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Ceramics (1) Laboratory.	5.	Ceramics (2) Laboratory.	5.	Ceramics (3) Laboratory.	5.
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows.	3.
Mathematics (18) Space Analytics.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Light and Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

VOLUNTARY

French (3)	2.	or German (2) Each through the year.	2.	or Rhetoric (4)	2.

THIRD YEAR

Ceramics (4) General Principles.	4.	Ceramics (5) Bricks.	5.	Ceramics (6) Pottery.	5.
Mine Engineering (4) Mine Surveying.	5.	Ceramics (7) Advanced Chemical Laboratory Work.	5.	Metallurgy (2) Minerology.	3.
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
				Shopwork (11) Forging.	3.

FOURTH YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Ceramics (9) Manufacture of Bodies.	5.	Ceramics (10) Glasses and Glazes.	5.	Ceramics (11) Enamels and Colors.	5.
Shopwork (4) Chipping and Filing.	3.	Ceramics (12) Cement.	5.	Ceramics (15) Thesis Work.	5.
Geology (5) General.	5.	Ceramics (17) Ceramic Construction.	4.	Ceramics (14) Reports.	5.
Metallurgy (4) Fuels and Iron.	5.	Geology (6) Economic.	3.	Drawing (7) Photography.	2.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of Ceramic Engineering. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN INDUSTRIAL ARTS

This course is designed to furnish a strong basis for those wishing to become teachers of Manual Training, and for those intending to enter the various branches of manufacture and industry, not as engineers, but as practical managers, superintendents or business men. The required part of the course combines with a general science training a large amount of drawing and shop work, in which the underlying principles and methods employed in various branches of industry are dwelt on. Large liberty of election of studies is allowed the student. His election, properly exercised, together with the required work will equip the student for a wide range of occupations along the lines stated. The aim of the course is educational as well as professional, the training of the mind and hand together.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (2) Qualitative Analysis.	5.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
German (1)	4.	German (1)	4.	German (1)	4.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	3.	Drawing (3) Shades, Shadows.	3.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Physics (3) Problems.	2.	Physics (3) Problems.	2.	Physics (3) Problems.	2.
Shopwork (7) Woodwork.	3.	Shopwork (9) Adv. Pattern Making.	3.	Shopwork (8) Cabinet Work.	3.
Shopwork (3) Foundry.	3.	Shopwork (11) Forging.	3.	Shopwork (12) Adv. Forging.	3.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.
Economics (51) Elementary.	4.	Economics (51 and 56).		Economics (56) Ind. and Soc. Ref.	2.
Military Drill.		Military Drill.		Military Drill.	

THIRD YEAR

Drawing (5) Technical.	3.	Industrial Arts (2) Designing.	3.	Industrial Arts (2) Designing.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Shopwork (4) Chipping and Filing.	3.	Shopwork (13) Machine Work.	3.	Shopwork (14) Machine Work.	3.
Metallurgy (4) Fuels and Iron.	5.	Metallurgy (4) Steel.	2.	Civil Engineering (21) Surveying.	3.
Economics (65) Commercial Geog.	2.	Economics (65).		Economics (58 or 66)	2.
Economics (55 or 57)	2.	History (56).		History (56) U. S. Political.	4.
		Economics (55 or 57).			
		Economics (58 or 66).			
		Mech. Engineering (22) Timber and Masonry.	3.		

FOURTH YEAR

Shopwork (15) Adv. Mach. Work.	3.	Shopwork (16) Adv. Mach. Work.	3.	Shopwork (17) Adv. Mach. Work.	3.
Political Science (53) Polit. Inst. of U. S.	3.	Political Science (53). Polit Inst. of U. S.			
Elec. Engineering (6) Lectures.	2.	Elec. Engineering (6) Lectures.	2.	Mech. Engineering (32) Power Plants.	5.
Elec. Engineering (7) Laboratory.	2.	Elec. Engineering (7) Laboratory.	2.		
Industrial Arts (3) Shop Equipment.	3.	Industrial Arts (3) Shop Appliances.	3.	Industrial Arts (3) Shop Management.	3.
Industrial Arts (4) Adv. Designing.	3.	Industrial Arts (4) Adv. Designing.	3.	Industrial Arts (4) Adv. Designing.	3.
Mech. Engineering (28) Laboratory.	2.	Mech. Engineering (29) Laboratory.	2.	Mech. Engineering (30) Laboratory.	2.
		Thesis.		Thesis	3.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of a special study. The subject of such study must lie within the field of Industrial Arts. The subject must be announced to the President of the University (dependent upon the written approval of the head of the Department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN CHEMISTRY

The object of this Course is to prepare students for work in Industrial Chemistry or Metallurgical Chemistry, according to electives chosen. With proper electives it will also be found a desirable course for students expecting to become general analytical chemists.

The electives are subject to the approval of the head of the department of Chemistry, or of Metallurgy and Mineralogy for students in Metallurgical Chemistry.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	2.	Drawing (1) Freehand.	2.	Drawing (2) Lettering.	3.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	5.
German (1) or (4)	4.	German (1) or (4)	4.	German (1) or (4)	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Chemistry (20) Quantitative.	4.	Chemistry (20) Quantitative.	4.	Chemistry (20) Quantitative.	4.
Chemistry (21) Physical Chemistry.	2.	Chemistry (21) Physical Chemistry.	2.	Chemistry (21) Physical Chemistry.	2.
German (5) Scientific Reading.	4.	German (5) Scientific Reading.	4.	German (5) Scientific Reading.	4.
Physics (2) Mechanics and Heat.	3.	Physics (2) Electricity & Magnetism.	3.	Physics (2) Sound and Light.	3.
Shopwork (7) Woodwork.	3.	Shopwork (11) Forging.	3.	Metallurgy (2) Mineralogy.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

Electives three to five hours throughout the year.

The following are suggested: Mathematics (18, 19, 20), 5 hours; Drawing (3), 3 hours; Physiology (3) 3 hours; History (5), 4 hours; Economics (1), 4 hours.

THIRD YEAR

Chemistry (8) Organic.	5.	Chemistry (9) Organic.	5.	Chemistry (9) Organic.	5.
Metallurgy (5) Laboratory.	5.	Metallurgy (6) Assaying.	5.	Metallurgy (5) Laboratory.	5.
Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.	Rhetoric (3) Advanced.	2.

Electives five to eight hours throughout the year.

The following are suggested: Physical Laboratory, 3 to 5 hours; Geology, 5 hours—or Geology and Determinative Mineralogy, 5 hours; Shopwork, 3 hours.

FOURTH YEAR

Chemistry (17) Inorganic Preparations.	4.	Metallurgy (4) General.	5.	Chemistry (15) Sanitary.	4.
Metallurgy (4) Fuels and Iron.	5.	Chemistry (16) Applied.	3.	Ceramics (16) Applied.	3.
		Physiology (8) Bacteriology.	2.		

Electives to make the total work equal sixteen or eighteen hours, including Thesis work.

Students in Metallurgical Chemistry will take Ore Dressing the first term. and Metallurgy (4) 5, through the second term. For such students Chemistry (14, 15, 16) and Physiology (8) will not be compulsory.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of the study must lie within the field of Chemistry or Metallurgy. The subject must be announced to the President of the University (dependent upon the approval of the head of the department), not later than the beginning of the second term of the fourth year, and the completed thesis must be submitted not later than the second Saturday before Commencement Day.

COURSE IN ARCHITECTURE

This Course was established in 1896, to meet a growing demand for special training along this line. The extremely rapid developments, in late years, of novel methods of construction, the constantly extending list of materials used, and the creation of types of building entirely without precedent in the history of architecture, render it not only desirable, but imperative, that a large class of thoroughly trained and equipped men shall be brought forward, if this progress is to be maintained.

The employment in architecture of so many young men trained in other branches of engineering seems to prove the urgent need of those whose training is directed expressly to this end.

The Course offered gives a good training in mathematics, physics and mechanics, which are fundamental, together with a thorough drill in drawing, designing, shopwork, and the more technical branches of architecture proper.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	3.	Drawing (1) Freehand.	3.	Mathematics (17) Plane Analytics.	5.
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Metallurgy (2) Mineralogy.	3.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Trigonometry, Algebra.	2, 3.	Modern Language French or German.	4.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Modern Language French or German.	4.	Modern Language French or German.	4.	Drawing (2) Lettering.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geom.	5.	Drawing (3) Shades, Shadows.	5.
Mathematics (18) Space Analytics.	5.	Mathematics (19) Calculus.	5.	Mathematics (20) Calculus.	5.
Physics (2) Mechanics, Heat.	3.	Physics (2) Electricity, Magnetism.	3.	Physics (2) Light, Sound.	3.
Architecture (9) History of Architecture.	3.	Architecture (10) History of Architecture.	3.	Architecture (11) History of Architecture.	3.
Architecture (12) Detail Drawing.	2	Architecture (13) Detail Drawing.	2.	Architecture (14) Detail Drawing.	2.
Drawing (14) Pen Drawing.	2.				
Cadet Service.		Cadet Service.		Cadet Service.	

THIRD YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (6) Mechanics.	5.	Mech. Engineering (7) Strength Materials.	5.
Architecture (15) Designing.	4.	Architecture (16) Designing.	2.	Architecture (17) Designing.	4.
Drawing (7) Photography.	2.	Drawing (12) Clay Modeling.	2.	Drawing (12) Clay Modeling.	2.
Elec. Engineering (6) Lectures.	2.	Elec. Engineering (6 & 7) Lectures and Lab.	4.		
Architecture (5) Decorations, etc.	3.	Civil Engineering (6) Stereotomy.	4.	Civil Engineering (19) Trusses.	5.
Rhetoric (3)	2.	Rhetoric (3)	2.	Rhetoric (3)	2.

FOURTH YEAR

Architecture (18) Designing.	4.	Architecture (4) Specifications.	2.	Architecture (6) Estimates and Supt.	4.
Civil Engineering (15) Masonry.	5.	Architecture (7) Heating, Vent., etc.	5.	Architecture (19) Designing.	4.
Mech. Engineering (23) Materials of Const.	4.	Architecture (8) Designing.	5.	Architecture (20) Thesis.	5.
Geology (5) General.	5.	Geology (6) Economic.	3.	Civil Engineering (21) Surveying.	3.
		Drawing (18) Color Work.	3.	Drawing (19) Color Work.	2.

THESIS

At the beginning of the fourth year, each student in this Course will take up as thesis work some special line of inquiry within the field of his major study, subject to the approval of the professor in charge of the department, and must devote to it two hours per week, or its equivalent, independently of his other work. The subject, together with a written approval of it by the head of the department within which it lies, must be submitted to the President of the University, not later than the beginning of the second semester of the fourth year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

REQUIREMENTS FOR ADMISSION TO THE SHORT COURSES IN MINING, IN CLAY-WORKING AND CERAMICS, AND IN INDUSTRIAL ARTS

Applicants must not be less than sixteen years of age; and unless they are over twenty-one years of age must pass an examination in Arithmetic, Geography, Grammar and Orthography, or bring High School or other certificates for these branches.

Applicants who are over twenty-one years of age are admitted without examination.

SHORT COURSE IN MINING

The Short Course in Mining is especially designed for young men who have had a practical experience in mines, and wish to study Mine Surveying, Drafting, the problems of Ventilation, Drainage, Haulage, Mine Operating, etc., and also something of the sciences bearing upon their work, but have neither the time nor the preparation for a full college course. The first year is devoted to a thorough study of the elementary mathematics and sciences necessary to prepare the student for the practical work of the second year. The experience of the past eight years

has shown beyond any doubt that any enterprising young miner can master the subject sufficiently well in the time assigned to materially increase his earning capacity and chances for promotion in his occupation.

Personal instruction is given, and it is made thoroughly practical and of such a character as to best adapt it to the needs of the individual student.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Geometry.	5.	Mathematics (14) Trigonometry.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (1) Freehand.	2.	Drawing (4) Draughting.	3.	Drawing (2) Lettering.	2.
Drawing (3) Projections.	3.	Geology (4) Elementary.	5.	Metallurgy (9) Mineral Chemistry.	5.
Chemistry (7) Inorganic.	5.	Chemistry (13) Laboratory.	3.	Mine Engineering (3) Mine Operating.	5.
Mine Engineering (1) Mine Surveying.	5.	Mine Engineering (2) Ventilation and Haulage.	5.	Shopwork (11) Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SHORT COURSE IN CLAY-WORKING AND CERAMICS

The two-year or Industrial Course is designed to assist young men who have already been actively engaged in the Ceramic industries, and who, on account of mature years, or lack of means, or lack of previous educational advantages, are unable to avail themselves of the full and complete course, and yet who wish to increase their earning power or chances of promotion by fitting themselves for other than routine labor. The requirements for admission to this course are very low, and the work required throughout is much less severe than that of the four-year course; in fact, anyone who is willing to really apply himself, can retain his membership in this class, but there is no place for any but those who are thoroughly in earnest, and poor work will not be accepted from those who are able to do good work.

In short, in this Industrial Course, the department recognizes its closest medium of communication with the wants of the clay industries, and it is intended to so maintain this course as always to render the greatest good to the greatest number.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Analytical.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Mathematics (1) Algebra.	5.	Mathematics (3a) Geometry.	5.	Shopwork (11) Forging.	3.
				Shopwork (4) Chipping and Filing.	2.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Ceramics (1) Chemical Analysis.	5.	Ceramics (2) Analysis of Clays.	5.	Ceramics (3) Analysis of Glazes.	5.
Ceramics (4) General Principles.	5.	Ceramics (5) Bricks.	5.	Ceramics (6) Pottery.	6.
Geology (2) General.	5.	Geology (6) Economic.	3.	Drawing (11) Mechanical.	5.
		Drawing (1) Freehand.	2.		
Cadet Service.		Cadet Service.		Cadet Service.	

SHORT COURSE IN INDUSTRIAL ARTS

This Course is primarily designed to extend the benefits of the same kind of training as that given in the four-year course in this subject to that class of young men who may be unable for any reason to undertake a course of four years' duration, but who aspire to become actively engaged in factory work. It has been the aim to give, in as condensed a form as possible, those studies which will most rapidly and easily be turned to practical account in manufacturing operations; such as drawing, shop work, use of machine, tools, etc., together with a grounding in the physics and mathematics which underlie these operations.

The Course will be found most valuable to young men already engaged in factory work, who find themselves limited from rising in their work on account of lack of technical education.

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.	Drawing (1) Freehand.	1.
Drawing (8) Geometric.	2.	Drawing (8) Projections.	2.	Drawing (2) Lettering.	2.
Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.	Mathematics (2) Algebra.	5.
Mathematics (3) Plane Geometry.	5.	Mathematics (13) Space Geometry.	5.	Mathematics (14) Trigonometry.	5.
Shopwork (7) Carpentry & Pattern Making.	3.	Shopwork (9) Advanced Pattern Making.	3.	Shopwork (11) Forging.	3.
Cadet Service.		Cadet Service.		Cadet Service.	

SECOND YEAR

Drawing (3) Projections.	3.	Drawing (3) Descriptive Geometry.	3.	Drawing (3) Shades, Shadows.	3.
Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.	Industrial Arts (1) Tools and Machines.	3.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Geology (1) Physical Geography.	5.
Shopwork (3), (4) Foundry and Chipping and Filing.	5.	Shopwork (13) Machine Work.	5.	Shopwork (15) Advanced Machine Work.	5.
Cadet Service.		Cadet Service.		Cadet Service.	

THE COLLEGE OF LAW

FOR ADMISSION

(Until September, 1901.)

The following are the requirements:

1. *To the First Year*—Applicants for admission to the First Year must present satisfactory evidence (by teacher's certificate—High School, Academy or College diploma—or by examination) of having a good common school education, including *United States History, Civil Government* and a thorough training in *English Composition.*

2. *The Second Year*—In addition to the requirements for admission to the First Year, applicants for admission to the Second Year must present satisfactory evidence of having completed the work of the First Year or its equivalent.

3. *To the Third Year*—In addition to the requirements for admission to the Second Year, applicants for admission to the Third Year must present satisfactory evidence of having completed the work of First and Second years, or its equivalent.

Students seeking a degree must, at the time of registration, present in addition to the requirements above mentioned satisfactory evidence of having completed a course of study, the minimum requirement of which is as follows:

Arithmetic, Civil Government, Geography, Grammar, History of the United States, Physical Geography, Physiology, Rhetoric, Physics, (Gage or an equivalent) *Geometry, Algebra,* (Wentworth's elements or an equivalent); and, in addition, the equivalent of 75 hours per week for one term of 12 weeks (a total of 900 hours) chosen from any five or more of the following subjects, one at least being a Science and two at least being in History or Political Science (unless the applicant is especially permitted to offer approved substitutes): *Botany, Chemistry, English Constitutional History, English History, English Literature, French, Geology, General History, German, Greek, Latin, Logic, Physics, Political Economy, Psychology, Surveying, Trigonometry, United States Constitutional History; provided,* that not less than 65 hours for twelve weeks (a total of 780 hours) of this work shall be of collegiate or university grade. If this last mentioned work has been done by the candidate in a College or University of good standing, certificates of such institution will be accepted. In all other cases the candidate is subject to examination on the work required from this last group. In general, in the absence of satisfactory certificates, opportunity will be given for examination in any subject required for admission as above indicated. Blanks for applications for degrees will be furfurnished on request.

FOR ADMISSION

(On and after September, 1901.)

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth;* Milton's *Lycidas, Comus, L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of*

Wakefield; Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of all of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

3. *Algebra*—Taylor's Academic or equivalent.
4. *Botany*—Kellerman's Elementary Botany and Spring Flora
5. *Civil Government*—Fiske or Thorpe preferred.
6. *Geometry, Plane and Solid*—Venable, Wentworth or Wells.
7. *History*—Either Myers's General History (or equivalent); or, if the teacher's training and the school library will warrant, Greek and Roman History on the topical method. A circular concerning the topical method will be sent on application.
8. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.
9. Any two of the following languages, in the quantity indicated below. Latin, Greek, French or German, or any one of them and the group of subjects named under (*e*) below.

(*a*) *Latin*—Pronunciation (the Roman method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first four books of the *De Bello Gallico;* Cicero, six orations, including *Pro Lege Manilia;* Vergil, the first six books of the *Aeneid*, with Prosody; Prose Composition, Daniell or Collar or Jones, entire.

(*b*) *Greek*—Grammar (Goodwin's preferred) and Prose Composition; or the first 100 lessons of White's Beginner's Greek Book. Reading: The first four books of Xenophon's *Anabasis.* At least two years should be devoted to this work.

(*c*) *French*—The whole subject of French Grammar. Applicants will be expected to read at sight easy French; and to translate correctly into French, simple English sentences. Two years ought to be given to this study, the first year being spent mainly on the Grammar with easy reading; the second devoted to reading good modern French, with grammatical analysis and exercises in writing. The texts read should be chiefly narrative and conversational prose; one or more prose comedies of the nineteenth (*not* the seventeenth) century should be included.

(*d*) *German*—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, *i. e.*, declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax. The following books or their equivalents must have been read (not less than 600 pages). Joynes's or Whitney's Reader; Hillern's Höher als die Kirche; Riehl's Der Fluch der Schönheit; Freytag's Die Verlorne Handschrift, Gerstäcker Irrfahrten.

(*e*) While the preferred requirement is that each candidate shall offer any two of the foregoing languages, he will be permitted to offer in place of one of the two the following group:

1. *Chemistry*—Williams' or Remsen's.
2. *Physiology*—Martin's (briefer course).
3. *English Literature*—Pancoast's Introduction to English Literature and an acquaintance with representative works in each period; or, *English History*, Montgomery.

In addition to the foregoing requirements for admission to the work of the College, *each candidate for a degree* must submit satisfactory evidence that he has successfully pursued a course of study equivalent to the first two years of any course leading to a degree in the College of Arts, Philosophy and Science, of this University. Where this work has been done in a college or university of approved standing, the certificate of said college or university will be accepted. In all other cases the candidate will be subject to examination in such work.

COURSE IN LAW

FIRST YEAR

First Semester	Credit hours	Second Semester	Credit hours
Elementary Law (including Domestic Relations)	15	Agency	2
		Contracts	4
		Criminal Law	3
		Sales	2
		Torts	4
	15		15

TEXT-BOOKS

First Semester — Elementary Law (Robinson, Walker, Tenth Ed., and Blackstone).

Second Semester — Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

Bailments	3	Construction of Contracts	2
Commercial Law	5	Evidence	2
Evidence	2	Partnership	2
Pleading	4	Pleading	2
Moot Court	1	Real Property	4
		Wills	2
		Moot Court	1
	15		15

TEXT-BOOKS

First Semester — Bailments (Hale); Commercial Law (Tiedeman); Evidence (Greenleaf, Sixteenth Ed.); Pleading (Phillips), and Kinkead's Selections.

Second Semester — Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Page).

THIRD YEAR

Circuit and Supreme Court Practice	1	Corporations (Private)	2
Constitutional Law / International Law	4	Corporations (Municipal), Negligence of	3
		Ethics	2
		Federal Practice	2
Corporations (Private)	2	Mortgages / Suretyship	2
Corporations (Municipal)	2		
Equity Jurisprudence	4		
Probate Law	2	Trial Practice	2
Moot Court	1	Moot Court	1
	16		14

Thesis for graduation to count for two hours through second semester.

TEXT-BOOKS

First Semester — Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence; Probate Law (Whittaker's Probate Code).

Second Semester — Ethics (Sharswood); Trial Practice (Kinkead); Negligence of Municipal Corporations (Jones); Suretyship (Baylies).

PURPOSE AND METHODS

It is the purpose of this College to furnish such legal training as will secure the most favorable judgment of the profession, and such as will fit students for practice in any part of the country.

The aim is to teach an accurate knowledge of the principles of the law, and to illustrate the application of these principles to the practical affairs of life—to teach students both to know and to apply the law. The instruction offered includes a Course containing three years of nine months each. It requires about fifteen hours of lecture and recitation work per week each year, and embraces all the elementary and practical studies necessary for admission to the Bar of any State administering the Common Law.

The methods of instruction combine the advantages of all approved systems and appliances—the text-book and recitation system, the lecture system, and the case system. Charts, outlines, analyses, essays, note-taking, oral and written lectures, reviews and examinations are used; and exercises are given in drafting contracts, abstracts, conveyances, wills, protests, mercantile contracts, pleadings, indictments, and other legal papers. Briefs, arguments in moot courts, etc., are required. Attention is given to the study and accurate analysis of leading cases.

GENERAL REGULATIONS

IRREGULAR STUDENTS

In special cases, students who have had part of the studies of the First Year and part of those of the Second Year, or part of those of the Second Year and part of those of the Third Year, may be examined on whatever subjects they may select and may take part of the studies of both years, if the Faculty is satisfied that the applicants can do so to advantage. If candidates for a degree, such applicants must meet all the other requirements and have all the other qualifications of those seeking a degree.

SPECIAL STUDENTS

Persons wishing a knowledge of legal principles *for business purposes only*, but not intending to apply for a degree or to take a full course, may be admitted at any time as special students, and may avail themselves of such advantages of the College as they may deem expedient. Their convenience will not be taken into consideration in arranging classes, and they must make satisfactory arrangements as to fees, hours of recitation, etc., with the Dean.

ENTRANCE EXAMINATIONS

Entrance examinations, except for those seeking a degree, will not be technical; the object being to ascertain the results of previous training and practical capacity to appreciate the technical study of the law.

APPLICATIONS FOR DEGREES

At the time of registration all applicants who seek degrees should present their diplomas and certificates of work done. These certificates should state in detail

the studies pursued, the text-books used, the amount of work done in each study, the amount of time devoted to it, the date of the examination, and the rank or standing of the candidate in it. A copy of the course of study must accompany the certificate in all cases, and must accompany it where equivalents are offered. These statements should also be accompanied by information as to age, occupation, experience, and work done since leaving school. Blanks for application will be furnished on request made to the Dean.

EXAMINATIONS

Examinations are held from time to time to test the student's knowledge of the work he has gone over. They are usually written, but sometimes oral.

THESIS

Each candidate for a degree is required to prepare and deposit with the Faculty, at least six weeks before the end of the year of graduation, a thesis of not less than fifteen hundred nor more than five thousand words, exclusive of citations of authorities, upon some subject selected by himself with the approval of the professor giving instruction in that division of law from which the subject is chosen.

DEGREES

The degree of Bachelor of Laws (LL. B.) will be conferred on all who, being at least twenty-one years of age and having met the requirements necessary for entrance for a degree, pass satisfactorily the examinations at the close of the Senior year, after having done at least the last year's work in the College of Law at the University, and having presented a thesis acceptable to the Faculty.

The degree of Master of Laws will be conferred upon any one who has received the degree of Bachelor of Laws at this University, or other approved University or College, upon completing the studies of the Graduate year, and satisfactorily passing an examination therein, and presenting a satisfactory thesis; the subject of which has been chosen from the field included in the Graduate year.

CERTIFICATES OF WORK DONE

Those who have completed the studies of the College, but have not complied with the requirements for a degree, will be given an official certificate, showing the work done, and signed by the President of the Board of Trustees, the President of the University, and the Dean of the College of Law.

ADMISSION TO THE BAR

The regular Supreme Court examination for the admission to the bar is held on the first Tuesday in June of each year. Seniors are required to take this examination before they can receive the degree or certificate above mentioned.

COURSE OF INSTRUCTION

The Course of Study is three years of nine months, or thirty-six weeks, each; covering about fifteen hundred hours of work. It is so arranged that each class will have an average of three recitations a day, each one hour in length, thereby doing the same amount of work that is done in a regular University course.

MOOT COURT

Second Year and Third Year students will have Moot Court, under the supervision of the Dean, throughout the year, not less than one hour each week. The

object of Moot Court is to give practical insight into the conduct of trials, examination of witnesses, production of evidence, etc.

ADVANTAGES

LOCATION

Attention is called to Columbus as a place in which to study law. Here the Legislature meets. Here are the Supreme Court and Circuit Court; four branches of the Common Pleas Court, in almost daily session throughout the college year; the Probate Court, the County Commissioners, the City Court, the several Magistrates' Courts; also the U. S. Circuit and District Courts. All are easy of access from the College. "There is no place where law is learned so quickly and thoroughly as among the lawyers. No teaching is so effective as the object lessons of the trial of cases in court."

LIBRARIES

The following libraries are accessible to the students:

The Law Library of the College contains the Noble Law Library, the Emerson McMillin Law Library, the Critchfield Law Library, and three sets of the Ohio and the Ohio State Reports; about 3,000 well selected volumes.

The University Library contains 25,000 volumes of very carefully selected books upon all subjects. This is quite complete in the more recent standard works upon history and political science, philosophy, etc. A good collection of the leading scientific, technical and literary magazines and journals is to be found here.

The State Law Library, of about 35,000 volumes—the largest and most complete Law Library in the State. It contains complete sets of the English, Scotch, Irish, Canadian, United States, and State Reports, Statutes and Digests, as well as all the important text books and leading periodicals published. This library is located in the new State Supreme Court building. It is designed wholly for reference, and students are warned that they must not use the library rooms as a study room, and that the text books found here are to be used for reference only. No student is expected, nor will he be permitted, to use these books instead of providing himself with those required in the course.

The State Library, in the State House—a library of general literature, history, science, biography, political and social science, philosophy, etc., comprising some 65,000 volumes. The leading magazines, journals, etc., are also to be found here.

The University Libraries are open from 7:30 a. m. to 9:30 p. m. during the five days in which the University is in session, and on Saturdays from 8 a. m. to 4 p. m. The State Law Library is open six days in the week, from about 8:30 a. m. to 5:30 p. m., with the exception of about an hour or an hour and a half at noon. The State Library is open six days in the week from 9 a. m. to 12 m., and from 2 p. m. to 5 p. m.; and when the Legislature is in session, from 7 p. m. to 9 p. m.

The City Library, with 30,000 volumes and a fine reading room, may also be used by students, under reasonable restrictions.

THE UNIVERSITY COURSES

Attention is called to the great advantage of attending a law school in close and vital connection with the University affording the means of a liberal, practical and technical education. Students who are disposed to work faithfully may, at the same time that they are acquiring a technical knowledge of the law, supplement their general education by joining University classes, in departments which they may elect, subject to the requirements for admission to such departments, without extra charge except for laboratory work. Not alone from the courses in History and Political Science, or from those in Mental and Moral Philosophy, should this

work be selected, but also from the courses in Civil, Mine, Mechanical, and Electrical Engineering, from the courses in Anatomy and Physiology, Economic Geology, etc. To the average practitioner, there will come ten questions involving the principles of surveying or engineering to one of the constitutional law or English history. Not a day passes in the litigation of the courts but that numerous questions of anatomy, physiology, surveying or engineering arise and are to be decided. Particular attention, therefore, is called to the technical courses offered by the University, which will be open to those in the College of Law who are able to take them without interfering with the required law work. The following departments offer courses which will prove beneficial to those who have not had such training as would enable them to take more technical work: Botany, Physiology, Physics, Civil Engineering, Mine Engineering, Chemistry (Toxicology), Geology, Philosophy, History, English.

EXPENSES

Each undergraduate student of the University is required to pay an incidental fee of fifteen dollars a year, and in this College a tuition fee of forty-five dollars; a total of thirty dollars for each semester, which is payable at the beginning of each semester.

Graduate students are required to pay a fee of thirty dollars for the year.

A fee of five dollars (to cover the expenses of graduation, diplomas, certificates, etc.,) is charged to all who receive the diploma or certificate, and a fee of ten dollars is charged to those taking the degree of Master of Laws. These fees must be paid before the degrees are conferred, or certificates delivered.

Good boarding and lodging, convenient to the University, can be obtained at from $3.50 to $5.00 per week.

The text-books used in this College can be obtained at the University at students' prices. The University has no pecuniary interest in these books or the sale of them, and they are permitted to be sold here merely for the convenience of the students.

The books for the first year	$41 00
For the second year	40 00
For the third year	36 00
Total for three years	$117 00

THE COLLEGE OF PHARMACY

FOR ADMISSION TO THE FOUR-YEAR COURSE[1]

The following are the requirements:

1. *Arithmetic, Descriptive and Physical Geography, English Grammar, and United States History.*

2. *English Composition and English Classics.*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of several brief essays, of which one will be upon a subject drawn from the applicant's observation or experience, and the others upon topics requiring a knowledge of the following books, or equivalents: Shakespeare's *Merchant of Venice, Julius Caesar,* and *Macbeth;* Milton's *Lycidas, Comus L'Allegro, and Il Penseroso;* Burke's *Conciliation with the Colonies;* Macaulay's *Essays on Milton and Addison;* The Sir Roger de Coverly Papers in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *The Ancient Mariner;* Scott's *Ivanhoe;* Carlyle's *Essay on Burns;* Tennyson's *The Princess;* Lowell's *The Vision of Sir Launfal;* George Eliot's *Silas Marner.*

To meet the English requirement the schools should provide courses in composition-practice and courses in English classics extending side by side through the preparatory years.

In the courses in composition, pupils should be afforded regular and abundant practice in preparing narrative, descriptive, expository and argumentative themes, and should be familiarized with those principles of Rhetoric which are most helpful in composition, such as the principles of sentence-structure, outlining, paragraphing, and choice of words. Scott and Denney's Composition-Rhetoric is recommended as a guide. The study of specimens of bad English from a text-book is not recommended; in order to insure accuracy, a considerable amount of the written work of the pupils should be corrected by the teacher and revised and rewritten by the pupils themselves. Some of the composition-work may be based upon the reading prescribed above, but much of it should be based upon the observation and experience of the pupils.

In the course in English classics, pupils should read the prescribed books with sufficient care to become familiar with the plot, incidents, and characters of all of them and should also learn something of their authors and of their places in literary history. A few of these books, or portions of oll of them, should be examined closely with reference to form, structure, method, language, and leading characteristics of style. The voluntary outside reading of additional books should be encouraged by the teacher. In connection with all of the reading it is recommended that the memorizing of notable passages of prose and poetry be required.

3. *Algebra*—Taylor's Academic or equivalent.
4. *Botany*—Kellerman's Elementary Botany and Spring Flora or equivalent.
5. *Civil Government*—Fiske or Thorpe preferred.
 Or History—Myers's *General History.*
6. *Geometry, Plane and Solid*—Venable, White, Wentworth, or Wells.
7. *Latin*—Pronunciation (the Roman Method); Grammar (an exact knowledge of the inflections is essential); Cæsar, the first three books of the *De Bello Gallico.*

Or *German*—Joynes-Meissner's or Thomas's Grammar is recommended. The essentials in these grammars should have been mastered thoroughly, i. e., declensions of nouns and adjectives, pronouns, comparison of adjectives, prepositions, regular and irregular verbs and essentials of syntax.

The following books or their equivalents must have been read (not less than 600 pages.) Joynes's or Whitney's Reader; Hillern's Höher als die Kirche; Riehl's Der Fluch der Schöenheit; Freytag. Die Verlorne Handschrift; Gerstäcker Irrfahrten.

For the present, the *German* required for admission may be begun at the University, but without University credits.

8. *Physics*—Carhart and Chute, Gage, Avery, or Appleton.

COURSE IN PHARMACY

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Bachelor of Science in Pharmacy

FIRST YEAR

First Term	Credit hours	Second Term	Credit hours	Third Term	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Chemistry (12) Qualitative Analysis.	5.
Latin (1) Pharmaceutical	5.	Latin (1) Pharmaceutical	5.	Latin (1) Pharmaceutical	5.
or		or		or	
German (1) Elementary.	4.	German (1) Elementary.	4.	German (1) Elementary.	4.
Mathematics (14) Plane Trigonometry.	5.	Mathematics (15), (16) Spherical Trigonometry, Algebra.	5.	Mathematics (17) Plane Analytics.	5.
Rhetoric (5) Paragraph Writing.	2½.	Rhetoric (5) Theme Writing.	2½.	Rhetoric (5) Prose Analysis.	2½.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

Botany (6a) Systematic, Physiological.	5.	Botany (4) Medical.	2.		
Chemistry (20) Laboratory.	4.	Chemistry (20) Laboratory.	4.	Chemistry (20) Laboratory.	4.
German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.	German (2) Scientific Reading.	2.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensatories, etc.	5.
Physics (11) Mechanics and Heat.	3.	Physics (11) Electricity & Magnetism.	3.	Physics (11) Sound and Light.	3.
				Metallurgy (2) Mineralogy.	3.
Chemistry (21) Advanced Inorganic and Physical.	2.	Chemistry (21) Advanced Inorganic and Physical.	2.	Chemistry (21) Advanced Inorganic and Physical.	2.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

THIRD YEAR

Pharmacy (9) General Processes.	5.	Pharmacy (10) Prescriptions.	5.	Pharmacy (11) Dispensatories, etc.	5.
Pharmacy (12) Materia Medica.	3.	Pharmacy (13) Materia Medica.	3.	Pharmacy (14) Mat. Medica & Thera.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
General Chemistry (8) Organic.	5.	Physiology (8) Bacteriology.	2.	Physiology (5) Microscopy.	2.
		General Chemistry (9) Laboratory.	5.	General Chemistry (9) Laboratory.	5.

FOURTH YEAR

Geology (5) General.	5.	Geology (6) General.	3.	General Chemistry (11) Toxicology.	4.
Pharmacy (15) Assaying.	5.	Pharmacy (16) General.	5.	Pharmacy (17) General.	5.
Thesis.		Thesis.		Thesis.	

Chemistry elective for the year — five hours.
Elective, three hours through the year.

THESIS

As a requisite for graduation, each candidate must present an acceptable thesis embodying the results of special study and research. The subject must be within the field of Pharmacy, and must be announced to the President of the University (dependent upon the written approval of the proper authorities) not later than the beginning of the second term of the fourth year of the Course. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

SHORT COURSE IN PHARMACY

FOR ADMISSION

Candidates for admission who are less than twenty-one years of age must be prepared in the common English branches. Teachers' certificates (in force), or credentials from approved schools, will be accepted in lieu of an examination.

FIRST YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Chemistry (7) Inorganic.	5.	Chemistry (7) Inorganic.	5.	Botany (1) Elementary.	5.
Latin (1) Pharmaceutical.	5.	Latin (1) Pharmaceutical.	5.	Chemistry (12) Qualitative Analysis.	5.
Physics (1) Elementary.	5.	Physics (1) Elementary.	5.	Latin (1) Pharmaceutical.	5.
Pharmacy (6) General Processes.	3.	Pharmacy (7) U. S. Pharmacopeia.	5.	Pharmacy (8) Dispensatories, etc.	5.
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

SECOND YEAR

Botany (6a) Systematic, Phys.	5.	Botany (4) Medical.	2.	Chemistry (11) Toxicology.	4.
Chemistry (18) Organic.	5.	Chemistry (18), (19) Organic.	5.	Chemistry (19) Organic, Quantitative.	5.
Pharmacy (9) Phar. Chemistry.	5.	Pharmacy (10) Prescription Practice.	5.	Pharmacy (11) Dispensing Practice.	5.
				Physiology (1) Physiology.	3.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (5) Microscopy.	2.
		Physiology (8) Bacteriology.	2.		
Cadet Service (men).		Cadet Service (men).		Cadet Service (men).	
Hygiene and Physical Training (women).		Hygiene and Physical Training (women).		Hygiene and Physical Training (women).	

COLLEGE OF VETERINARY MEDICINE

FOR ADMISSION[1]

The following are the requirements:

I. For applicants for certificates of Veterinary Surgeon: *Arithmetic, Geography* and *Grammar.*

II. For applicants who intend to become candidates for the degree of Doctor of Veterinary Medicine:

1. *Arithmetic, Grammar, and Descriptive and Physical Geography.*
2. *English Composition and Rhetoric*—Each applicant will be tested as to his ability to write clear and correct English. The test will be the writing of two essays of about two hundred words each. The first essay will be upon a subject drawn from the candidate's observation or experience; as "A description of my native town," "The most remarkable person I ever met," "My reasons for seeking a University education." The second essay will be upon a subject drawn from a list of classics which will be furnished on application.
3. *History*—History of the United States, Johnson preferred.
4. *Latin or German*—One year.
5. *Pyhsics*—Gage, Carhart and Chute, Avery, or Appleton.
6. *Botany*—Kellerman's Elementary Botany and Spring Flora or equivalent.

COURSE IN VETERINARY MEDICINE

Note — The figure in parenthesis following the name of each study indicates the number of that study in its department. A full description of department work follows this statement of Courses.

Degree: Doctor of Veterinary Medicine

FIRST YEAR

First Term.	Credit hours	Second Term.	Credit hours	Third Term.	Credit hours
Agr'l Chemistry (1) Principles.	5.	Agr'l Chemistry (8) Organic.	5.	Agr'l Chemistry (9) Applications.	5.
Physiology (1) Human Anatomy.	3.	Physiology (1) Physiology.	3.	Physiology (1) Physiology.	3.
Physiology (4) Histology.	5.	Physiology (4) Histology.	5.	Physiology (4) Phys. Chemistry.	5.
Veterinary Medicine (28) Anatomy.	5.	Veterinary Medicine (28) Anatomy.	5.	Veterinary Medicine (28) Anatomy.	5.
Cadet Service.		Cadet Service.			

SECOND YEAR

Agriculture (8) Breeds of Live Stock.	4.	Agriculture (9) Stock Breeding.	4.	Agriculture (10) Stock Feeding and Hygiene.	4.
Pharmacy (12) Materia Medica.	5.	Pharmacy (13) Materia Medica.	5.	Pharmacy (18) Laboratory.	5.
Veterinary Medicine (14) General Pathology.	4.	Veterinary Medicine Theory & Practice.	5.	Veterinary Medicine Theory & Practice.	5.
Veterinary Medicine Helminthology.	1.	Veterinary Medicine (18) Surgical Diseases.	5.	Veterinary Medicine (18) Surgical Diseases.	5.
Veterinary Medicine (19) Clinic.	12.	Veterinary Medicine (19) Clinic.	12.	Veterinary Medicine (19) Clinic.	12.
Veterinary Medicine (24) General Surgery.	5.				
Cadet Service.		Cadet Service.		Cadet Service.	

[1] An applicant for admission who may be somewhat in arrears in any given subject, will find opportunity to make up this work in the Columbus High Schools, which are fully accredited by the University.

THIRD YEAR

First Term.	Credit hours
Veterinary Medicine Theory & Practice.	3.
Veterinary Medicine (19) Clinic.	12.
Veterinary Medicine (27) Meat Inspection.	4.
Veterinary Medicine (18) Surgical Diseases.	5.
Veterinary Medicine (31) Canine Diseases.	3.
Veterinary Medicine Milk Inspection.	1.

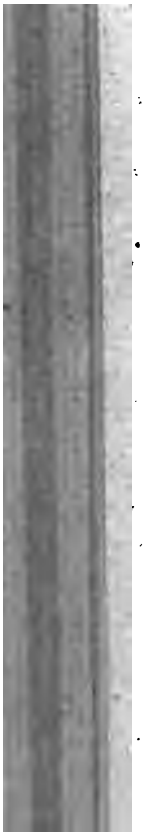
Second Term.	Credit hours
Veterinary Medicine (21) Theory & Practice.	3.
Veterinary Medicine (25) Practice in Operating.	3.
Veterinary Medicine (19) Clinic.	12.
Physiology (6) Bacteriology.	3.
Veterinary Medicine (23) Obstetrics.	3.
Veterinary Medicine (32) Canine Diseases.	3.
Thesis	2.

Third Term.	Credit hours
Veterinary Medicine (22) Therapeutics.	5.
Veterinary Medicine (19) Clinic.	12.
Veterinary Medicine (26) Horse Shoeing.	5.
Veterinary Medicine (33) Opthalmology.	2.
Thesis	2.

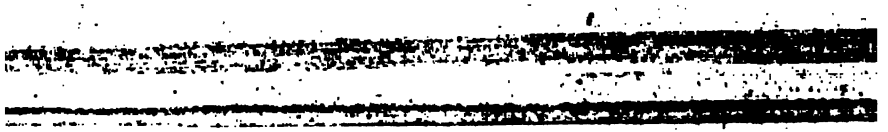
THESIS

As a requisite for graduation candidates for the degree of D. V. M. must present an acceptable thesis embodying the results of a special research. The subject must be announced to the President of the University (dependent upon the written approval of the head of the department in which it lies) not later than the beginning of the second term of the third year. The completed thesis must be submitted not later than the second Saturday before Commencement Day.

Candidates for a Certificate of Veterinary Surgeon are not required to present a thesis.



THE DEPARTMENTS



The Departments

1900-1901

The subjects set forth under each Department limit and define the administrative authority and responsibility of the head of that Department.

AGRICULTURE

[Townshend Hall]

Professor Hunt, Associate Professor Gibbs, Assistant Professor Decker, Mr. Herrick, Mr. Ruhlen.

8[1]. **BREEDS OF LIVE STOCK.** Lectures and recitations three times a week upon the history, characteristics, adaptation, care and management of the different breeds of domestic animals. Practicum once a week in scoring and judging live stock. First term.

9. **PRINCIPLES OF BREEDING.** Lectures and recitations three times a week upon laws of heredity and their practical applications. Practicum once a week in scoring and judging live stock, and in writing and tracing pedigrees. Second term.

10. **STOCK FEEDING AND HYGIENE.** Lectures and recitations three times a week upon the laws of nutrition, the character of food stuffs, the relation of the food to the animals, and the kind and quantity of food to produce given effects. Practicum once a week in calculating digestibles, nutritive ratios and feeding standards. Third term.

11. **FARM EQUIPMENT.** Lectures and recitations three times a week upon selecting, planning and equipping farms; planning and erecting farm buildings and fences; building roads; farm vehicles and machinery; power, water and drainage. Practicum once a week in drawing plans of farms and farm buildings; leveling and laying drains; dynamometer tests of wagons and farm implements. First term.

12. **SOILS.** Lectures and recitations three times a week upon the origin, formation, kinds, and physical properties of soils, and their improvement by cultivation, fertilization, drainage, and irrigation. Practicum once a week in laboratory testing physical properties of several soils, determining the relation of soils to heat, moisture, air, and fertilizers, and making mechanical analysis. Second term.

13. **FARM CROPS.** Lectures and recitations three times a week upon the history, production, marketing, cultivation, and harvesting of farm crops. Practicum once a week with growing and dried specimens of farm crops, including grasses, clovers, and other forage crops. Third term.

14. **ANIMAL MECHANICS AND EXTERIOR.** Lectures and recitations three times a week upon animal mechanics, proportions, and the relation of the latter to specific uses. Practicum once a week in measuring animals and testing the value of given measurements for given purposes. First term.

[1] These numbers are "finding numbers," and do not necessarily indicate the sequence of topics.

15. **BUTTER MAKING AND CHEESE MAKING.** Recitations twice a week. Laboratory practice two half days each week in running separators, churning and working butter, making cheese, and testing and pasteurizing milk. Second term.

16. **HISTORY OF AGRICULTURE AND RURAL ECONOMICS.** Lectures and recitations upon the history of agriculture; present agricultural methods in various countries; cost and relative profits of various farm operations and systems. Four times a week. Third term.

5. **DAIRY FARMING.** Lectures twice a week upon breeds, and upon feeding, breeding and selecting dairy stock; equipment and management of dairy farms. Practicum once a week in scoring and judging live stock, writing pedigrees, and calculating feeding standards. Second term.

6. **BUTTER MAKING AND CHEESE MAKING.** Practice in running separators, churning and working butter, etc., making cheese and testing and pasteurizing milk. Four half days each week. Second term.

7. **BUTTER MAKING AND CHEESE MAKING.** Lectures and recitations. Two hours each week. Second term.

15. **BUTTER AND CHEESE MAKING.** Lectures twice a week. Laboratory practice twice each week. This course is the same as courses 6 and 7, except that less laboratory practice is taken. Second term.

17. **MILK SANITATION.** Three times a week. First term. Lectures on and laboratory practice in what constitutes pure dairy products.

AGRICULTURAL CHEMISTRY

[TOWNSHEND HALL, Rooms 29, 35, 34 and 30]

Professor Weber, Mr. Vinsom

1. **PRINCIPLES OF CHEMISTRY AND CHEMICAL NOMENCLATURE.** Lectures and textbooks for three or four weeks, five times a week; then lectures twice a week on Chemistry of Non-metals, and laboratory practice three times a week. First term.

8. **ORGANIC CHEMISTRY.** Lectures twice a week; laboratory practice three times a week. Second term.

9. **APPLICATION OF CHEMISTRY TO AGRICULTURE.** Lectures twice a week; laboratory three times a week. Third term.

4. **LABORATORY.** Analysis of fertilizers, feed-stuffs, dairy products, fruits, vegetables, alcoholic liquors, etc. Five laboratory periods a week through the year.

7. **CHEMISTRY OF MILK AND MILK TESTING.** Twice a week. Dairy Course.

6. **LABORATORY.** Elective. Five or three times a week through the year.

AMERICAN HISTORY AND POLITICAL SCIENCE

(*See* History.)

ANATOMY AND PHYSIOLOGY

[BIOLOGICAL HALL, Rooms 12 and 20]

Professor Bleile, Assistant Professor Morrey, Mr. Dresbach

COLLEGES OF AGRICULTURE, PHARMACY, AND VETERINARY MEDICINE

1. **HUMAN ANATOMY AND PHYSIOLOGY.** Lectures, recitations and laboratory work three times a week. First, second and third terms. This course must be preceded by, or accompanied with, a course of chemistry.

2. **GENERAL PHYSIOLOGY.** Lectures recitations and demonstrations. Three times a week. Third term. [Short Course in Agriculture.]
3. **CHEMICAL PHYSIOLOGY.** Three times a week. Third term. [Domestic Economy Course.]
4. **HISTOLOGY AND HISTO-CHEMISTRY.** Five times a week through the year. This course must be preceded by, or accompanied with, a course in chemistry.
5. **MICROSCOPY AND URINARY ANALYSIS.** Lectures and laboratory work. Twice a week. Third term.
6. **BACTERIA.** in their relation to Milk, Butter and Cheese. Lectures and laboratory work. Twice a week. Second term.
7. **BACTERIOLOGY.** Three times a week. Second term. [Veterinary Medicine.]
8. **BACTERIOLOGY.** One lecture, one laboratory period, a week. Second term. [Pharmacy.]
9. **PHYSIOLOGICAL LABORATORY.** Three times a week. [May include work in bacteriology.]

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51[1]. **HUMAN ANATOMY AND PHYSIOLOGY.** Lectures, recitations and laboratory work. Three times a week.
53. **PHYSIOLOGICAL LABORATORY.** Three laboratory periods a week.
55. **PHYSIOLOGICAL LABORATORY.** Five laboratory periods a week.
57. **BACTERIOLOGY.** One lecture, one laboratory period a week.
59. **HISTOLOGY AND HISTO-CHEMISTRY.** Laboratory. Five laboratory periods a week.
61. **BACTERIOLOGY.** One lecture, two laboratory periods a week.

Second Semester

52. Continuation of Course 51. Three times a week.
54. Continuation of Course 53. Three laboratory periods a week.
56. Continuation of Course 55. Five laboratory periods a week.
58. **MICROSCOPY.** Lectures and laboratory work. Twice a week. Last half of semester.
60. Continuation of Course 59. Five laboratory periods a week.
62. Same as Course 61.

ANCIENT ART

(*See* Greek Language and Literature.)

ARCHITECTURE

(*See* Drawing.)

[1] "Finding numbers" from 51 upwards always indicate Semester work.

ASTRONOMY

[THE EMERSON MCMILLIN OBSERVATORY.]

Associate Professor H. C. Lord, Director of the Observatory.
Mr. J. Warren Smith, Lecturer on Meteorology.

COLLEGE OF ENGINEERING

4. **ASTRONOMY, GEODESY AND LEAST SQUARES.** Lectures on practical Astronomy. supplemented by practice with the instruments of the Emerson McMillin Observatory. Text-book, Doolittle. Three times a week. (First Term, third year, Course in Civil Engineering.)
5. Continuation of 4. Three times a week. (Second Term, third year, Course in Civil Engineering.)
6. Continuation of 5. Four times a week. (Third Term, third year, Course in Civil Engineering.)

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

61, 62. **GENERAL ASTRONOMY.** Lectures and recitations twice a week throughout the year.

63, 64. **ASTRONOMY AND GEODESY.** Lectures on practical Astronomy, supplemented by practice with the instruments of the Emerson McMillin Observatory. Open to students who have had the Calculus. Text-book, Doolittle. Three times a week throughout the year.

55, 56. **THEORETICAL ASTRONOMY.** Lectures and Observatory practice. The theory of the undisturbed motion of a planet or comet and the calculation of ephemerides. Parabolic orbits from three complete observations. Orbits from three complete observations, including the eccentricity. Work in the Observatory with the twelve-inch equatorial. Definite orbits. Observatory work continued. Authorities: Watson, Klinkerfeus, Appolzer, and the astronomical journals. Five times a week throughout the year.

57, 58. **ASTRO - PHYSICS.** Lectures on the theory of the Spectroscope and its use in Astronomy, supplemented by practice with the large spectroscope of the Observatory. Five times a week through the year.
Astronomy 55, 56, 57, 58 are open only to students who have had Calculus.

60. **METEOROLOGY.** Twice a week. Second half, second semester. Same as 3.

3. **METEOROLOGY.** Lectures on practical meteorology, supplemented by laboratory work in map and chart making, and regular observations with the instruments in use by Weather Bureau. Text-book, Davis; with the daily weather maps issued by the Bureau. Twice a week, third term.

BOTANY

[BOTANICAL HALL]

Professor Kellerman, Mr. Schaffner, Mr. Collett, Miss Dufour

COLLEGES OF AGRICULTURE, PHARMACY AND VETERINARY MEDICINE

1. **ELEMENTARY BOTANY.** Lectures, recitations and field work. Text-book: Kellerman's *Elementary Botany* and *Spring Flora* Must precede all other courses in this department except course 9. Five times a week. Third term.

4. **MEDICAL BOTANY.** Twice a week, second term. Similar to course 56 in the College of Arts, Philosophy and Science. Rerefence book: Maisch's *Organic Materia Medica.*

6. **PHYSIOLOGICAL BOTANY.** Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. First term.

6*a*. **SYSTEMATIC AND PHYSIOLOGICAL BOTANY.** Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. First term.

7. **PHYSIOLOGICAL AND ECONOMIC BOTANY.** Lectures, recitations and laboratory work. Coulter's Plant Structures. Five times a week. Second term.

8. **VEGETABLE PATHOLOGY.** Lectures, recitations and laboratory work. Five times a week. Third term.

9. **DENDROLOGY.** Lectures, field and laboratory work. Twice a week, first term. Open to students who have not studied Botany.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ECOLOGY AND PHYSIOLOGY.** Lectures and recitations twice a week; laboratory work once a week; credit three hours. Coulter's Plant Relations.

57. **LABORATORY WORK.** Fungi, Algæ, Bryophyta. Two or three times a week.

59. **ADVANCED LABORATORY WORK IN HISTOLOGY AND PHYSIOLOGY** Five times a week. Open to students who have taken Course 51, or 57.

61. **SYSTEMATIC BOTANY, PHENOGAMIC AND CRYPTOGAMIC.** Three to five times a week. Open to students who have taken Course 51, or 57.

63. **MONOGRAPHIC WORK.** Graduate Course. Credit five or ten hours.

65. **RESEARCH WORK IN MORPHOLOGY AND PHYSIOLOGY.** Graduate Course. Credit five or ten hours.

Second Semester

52. **MORPHOLOGY AND CLASSIFICATION.** Lectures and recitations twice a week; laboratory work once a week; credit three hours. Coulter's Plant Structures.

58. Continuation of Course 57. Pteridophyta, Gymnospermæ, Angiospermæ. Two or three times a week.

60. Continuation of Course 59. Five times a week.

62. Continuation of Course 61. Three to five times a week.

64. Continuation of Course 63. Credit five or ten hours.

66. Continuation of Course 65. Credit five or ten hours.

For Summer Courses in Botany, see Lake Laboratory.

CHEMISTRY

[CHEMICAL HALL, Rooms 24, 25, 14, 21, 22, 7 and 18]

Professor McPherson, Professor Norton, Assistant Professor Henderson
Mr. Kohr, Mr. Gore

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

First Semester

51. **ELEMENTARY CHEMISTRY.** Arranged for students who have little or no knowledge of Chemistry. Three sub-divisions; one lecture, one quiz, and three hours' laboratory practice weekly. In the laboratory the student performs an extended series of experiments illustrating the principles of Chemistry. Three hours credit.

53. **QUALITATIVE ANALYSIS.** Laboratory, lectures and quiz. Students familiarize themselves with the properties of the elements with a view to their detection, and then apply this knowledge to analysis of unknown substances. Three to five times a week. This course must be preceded by Courses 51 and 52.

55. **QUANTITATIVE ANALYSIS.** Laboratory, lectures and recitations. Use of the balance and general principles of gravimetric analysis. Drill in the solution problems in quantitative analysis; study of properties of precipitates; principles of volumetric analysis. Selections are made from such analytical methods as best meet the needs of the student. The samples used for analysis are mixtures or commercial products the percentage composition of which is not made known to the student until he has reported his own results. Three to five times a week. This course must be accompanied by course 69.

57. **ORGANIC CHEMISTRY.** Laboratory, lectures and recitations. Open only to students who are familiar with at least the principles of quantitative analysis. Five times a week.

59. **ADVANCED CHEMISTRY.** Laboratory. Arranged for special students who have had courses 53, 54, 55, 56, 57; also course 58 for students in Organic Chemistry. Students are allowed to select such work as they are capable of undertaking—as, the critical examination of analytical methods as well as the study of new methods Five times a week.

61*a*. **INORGANIC PREPARATION.** Laboratory. This course includes the preparation of inorganic substances from the crude materials. Special attention is given to the preparation of chemically pure compounds, to be used in certain quantitative processes. Thorpe's text-book on Inorganic Preparations is used, and reference is made to Bender and Erdmans' *Anorganische Praparate* and Krausche's *Pruefung Chemischer Reagientien.* This course must be preceded by quantitative analysis. Four times a week until the Christmas Recess.

Students electing this course must follow with theoretical chemistry and sanitary analysis.

61*c*. **HISTORICAL CHEMISTRY.** Lectures and recitations. A course of twelve weeks beginning after the Christmas Recess. Four times a week. Given biennially, offered in 1900–1901.

63. **CHEMICAL SEMINARY.** Special students will meet to discuss special topics and reviews of current literature. Once a week.

65. **ELECTROLYTIC ANALYSIS.** Laboratory. Extended practice is given in quantitative electrolytic analysis. Twice a week.

69. **ADVANCED GENERAL CHEMISTRY; PHYSICAL CHEMISTRY.** This course includes (*a*) a general survey of inorganic chemistry based upon the arrangement of the elements in accordance with the Periodic Law and (*b*) a discussion of the main principles of physical chemistry and their application to general processes. Twice a week.

Second Semester

52. Continuation of Course 51. Three hours credit.

54. Continuation of Course 53, including use of Spectroscope.

56. **QUANTITATIVE ANALYSIS.** Continuation of Course 55. Three to five times a week. This course must be accompanied by Course 70.

58. **ORGANIC CHEMISTRY.** Laboratory and lectures. Continuation of Course 57. Arranged for students who wish to specialize in organic chemistry. The course includes further preparation of typical organic compounds, their purification and analysis. Five times a week.

60. Continuation of Course 59.

64. Continuation of Course 63.

66. Repetition of Course 55.

68. **SANITARY ANALYSIS.** Laboratory and lectures. A study of the most important chemical methods for the analysis of water and air. This course must be preceded by quantitative analysis, and at least the equivalent of Course 61 in Anatomy and Physiology (bacteriology). The course extends over the last ten weeks of the second semester. Four times a week.

70. Continuation of Course 69.

Students who can elect but one year of Analytical Chemistry, will take Courses 53 and 66. Others will take 53 and 54, then follow with 55, 56 and 57.

COLLEGES OF ENGINEERING AND PHARMACY

7. **ELEMENTARY CHEMISTRY.** Inorganic. Lecture, Laboratory and Quiz. Laboratory work; First Term, experiments upon the non-metals; second term, principles of quantitative analysis. Five times a week.

8. **ORGANIC CHEMISTRY.** Lectures. Five times a week, first term.

9. **ORGANIC CHEMISTRY.** Laboratory and recitations. Five times a week. Second and third terms.

11. **TOXICOLOGY.** Four times a week. Third term.

12. **QUALITATIVE ANALYSIS.** Five times a week. Third term.

13. **QUALITATIVE ANALYSIS.** Three laboratory periods a week. Second term.

15. **SANITARY ANALYSIS.** Laboratory and lectures. A study of the most important chemical methods for the analysis of water and air. Four times a week. Third term.

16. **APPLIED CHEMISTRY.** Lectures on Industrial Chemistry. These are made as practical as possible by visits to different chemical works. When possible specialists deliver lectures on subjects belonging to their particular line of work. Four times a week. Second term.

17. **INORGANIC PREPARATIONS.** This course includes the preparation of chemically pure inorganic substances from the crude materials. Four times a week. Third term.

18. **ORGANIC CHEMISTRY.** Lectures and laboratory. Five times a week, for the first half of the year.

19. **QUANTITATIVE ANALYSIS.** Lectures and Laboratory. Five times a week for the second half of the year.

20. **QUANTITATIVE ANALYSIS.** Laboratory, lectures and recitations. Four times a week.

21. **ADVANCED GENERAL CHEMISTRY; PHYSICAL CHEMISTRY.** Twice a week.

For Courses in the technical analysis of iron, steel and allied products, see the Department of Mining and Metallurgy.

Four Courses dealing with the application of Chemistry to Agriculture, see the Department of Agricultural Chemistry.

CIVIL ENGINEERING

[HAYES HALL, Rooms 14 and 19]

Professor Brown, Assistant Professor Sherman, Mr. Groves

1. **LAND SURVEYING.** Recitations and field work. Johnson's Theory and Practice of Surveying. Six times a week. First term. Second year.

2. **RAILROAD SURVEYING.** Recitations and field work. Searle's Field Engineering. Six times a week. Third term. Second year.

3. **TOPOGRAPHICAL SURVEYING.** Lectures, field work and drawing. Johnson's Surveying used for reference. Four times a week. First term. Third year.

4. **TOPOGRAPHY.** Platting, pen and tinted work. Reed's Topographical Drawing and Sketching. Four times a week. Second term. Second year.

5. **STEREOTOMY.** Recitations, drawing and model cutting. Warner's Stereotomy. Four times a week. Second term. Third year.

7. **BRIDGE STRAINS.** Recitations and lectures. Part I of Dubois's Strains in Framed Structures. Five times a week. Third term. Third year.

8. **BRIDGE DESIGNING.** Lectures and drawing. Part II of Dubois's Strains in Framed Structures and Johnson's Modern Framed Structures used for reference. Five times a week. First term. Fourth year.

10. **SANITARY ENGINEERING.** Lectures. Five times a week. Third term. Fourth year.

14. **CIVIL ENGINEERING LABORATORY.** Cement testing, adjustment of instruments. Twice a week, Second term. Fourth year.

15. **MASONRY CONSTRUCTION.** Recitations and lectures. Baker's Masonry Construction. Five times a week. First term. Fourth year.

16. **HIGHWAYS.** Lectures on roads, streets, canals, railroads and rivers. Five times a week. Second term.
Fourth year students in Civil Engineering must elect either 16 or 17.

17. **RAILWAY LOCATION.** Recitations and lectures. Wellington's Economic Theory of Railway Location. Five times a week. Second term.
Fourth year students must elect either 16 or 17.

18. **WATER SUPPLY.** Recitations and lectures. Fanning's Water Supply. Five times a week. Third term. Fourth year.

19. **TRUSSES.** Lectures and drawing. Five times a week. Third term. Third year, Mine Engineering and Mechanical Engineering.

20. **ROOF TRUSSES.** Lectures and drawing. Five times a week. First term. Third year, Architecture.

21. **SURVEYING.** Recitations and field work. Davies' Surveying. Three times a week. Third term.
Third year, Architecture.

22. **SUMMER COURSE IN FIELD WORK.** The students are taken into camp in a rough, broken country and given a thorough drill in land and elementary railroad surveying. The course begins directly after commencement day, and continues four weeks of six days per week, ten hours per day. The work of the student and the discipline of the camp is in the hands of competent instructors. This course must be preceded by Courses 1; 2 and 4. Students conditioned on any of these courses, may be admitted at discretion of instructor in charge. (At conclusion of second year of course.)

23. **SUMMER COURSE IN FIELD WORK.** Similar to Course 22. Students work on advanced railroad surveying and topographical surveying. This course must be preceded by Courses 3, 22 and 24. Students conditioned in any of these courses may be admitted at discretion of instructor. (At conclusion of third year of course.)

24. **DRAWING OF ENGINEERING STRUCTURES.** Five hours a week. (Second Term, third year, Course in Civil Engineering.)

CLAY WORKING AND CERAMICS

[ORTON HALL, Rooms 18, 27, 26 and 25]

Professor Edward Orton, Jr., Mr. Bleininger

1. **CERAMIC CHEMISTRY.** This course is open only to those who have Completed General Chemistry 12. The student begins the quantitative analysis of salts and chemicals, and later works on limestone and other easy materials. Five times a week. (First Term, second year, Course in Ceramics and Short Course in Clay-working.)

2. Continuation of Course 1. The student begins the quantitative analysis of clays and complex minerals, working first on samples of known composition, and later on unknown materials. Five times a week. (Second Term, second year, Course in Ceramics and Short Course in Clay-working.)

3. Continuation of Course 2. The student completes the ultimate analysis of clays and begins the proximate "Rational" analysis of clays and pottery bodies, following the methods of Seger. Five times a week. (Third Term, second year, Course in Ceramics and Short Course in Clay-working.)

4. **LECTURES ON CLAY MANUFACTURE.** (supplemented by frequent recitations). The origin, composition and properties of clays and other minerals employed in the clay, glass and cement industries. Five times a week. (First Term, third year, Course in Ceramics; and second year, Short Course in Clay-working.)

5. Continuation of Course 4. A series of lectures, with recitations, on the general principles of the manufacture of bricks and the coarser clay wares, including the selection and winning of the materials, their preparation, manufacture, burning and testing. Five times a week. (Second Term, third year, Course in Ceramics; and, second year, Short Course in Clay-working.)

6. Continuation of Course 5. A series of lectures, with recitations, on the classification and manufacture of pottery and the finer grades of clay wares, including the selection of the materials, preparation of the bodies, manufacture of the ware, preparation of the glazes, burning and decoration of the wares and the pyrometry of ceramics. Five times a week. (Third term, third year, Course in Ceramics; and, second year, Short Course in Clay-working.)
 Course in Ceramics; and, second year, Short Course in Clay-working.)

7. **CERAMIC CHEMISTRY.** Continuation of Course 3. Open only to those who have completed that course. The analysis of glasses and glazes, devoting special attention to the use of hydrofluoric acid in silicate analysis, and to the determination of lead and boracic acid. Five times a week. (Second term, third year, Course in Ceramics.)

9. **LABORATORY WORK IN CERAMICS.** Open only to those who have completed Courses 3 and 6. The student will undertake the production of such wares as are made from single clays; then wares made by blending two or more natural clays; and, then, such wares as are made from an artificial body. In each case the bodies made will be burnt and tested. Five times a week. (First Term, fourth year, Course in Ceramics.)

10. Continuation of Course 9. The student will practice on the production of glasses and glazes, beginning with the natural "slip glazes" and taking successively the soft raw-lead glazes, the fritted lead-boracic-acid glazes, and the hard-fibre leadless porcelain glazes. In each case the glazes will be made for use on some definite body, and will be made to "fit." Five times a week. (Second Term, fourth year, Course in Ceramics.)

11. Continuation of Course 10. The student will practice on the use of the coloring and opacifying oxides in glazes, and on the production of colors for the decoration of pottery, and of body-stains. Five times a week. (Third term, fourth year, Course in Ceramics.)

12. **LECTURES ON CEMENT MANUFACTURE.** The theory of hydraulicity, the compounding, manufacture and testing of natural and Portland cements and hydraulic silicates. Open to students who have had courses 3 and 6. Facilities for laboratory work in making, burning and testing cements will be given. Five times a week. (Second Term, fourth year, Course in Ceramics.)

14. **MINERAL REPORTS.** A series of lectures on the prospecting and opening of mineral properties and ceramic plants. Frequent trips will be made to the important clay-working centers of Ohio for field work and practice in observation. Students will be allowed to specialize along their intended lines. Five times a week. (Third Term, fourth year, Course in Ceramics.)

15. **THESIS.** As a requisite for graduation, each candidate must present an acceptable thesis, embodying the results of a special study. The subject of this study must lie within the field of the degree sought. The subject must be announced to the President of the University (dependent upon the approval of the head of the Department), not later than the beginning of the second term of the fourth year; and the completed thesis must be presented on standard paper of certain size and quality, type-written, bound, and titled, not later than the second Saturday before Commencement Day.

16. **GENERAL PRINCIPLES OF APPLIED CERAMICS.** A series of lectures on the chemical technology of the clay, glass and cement industries. Three times a week. (Third Term, fourth year, Course in Chemistry.)

17. **PRACTICE** in making drawings and specifications for brick kilns, brick dryers, pottery kilns, gas producers, glass pot-furnaces, glass tanks, cement kilns and burning cylinders. Students will be allowed to specialize along the lines they intend to follow. Four times a week. (Second Term, fourth year, Course in Ceramics.)

DOMESTIC ECONOMY

[HAYES HALL, Rooms 1, 3, 10.]

Associate Professor Bowman, Assistant Professor Souther

Domestic Science

1. **FOOD ECONOMICS.** One lecture and three laboratory periods each week. Four hours credit. Lectures embracing a study of the evolution of society as affected by food conditions; second, a study of food principles. Laboratory work includes experimental work with foods, and the preparation and serving of typical foods of certain classes. Offered in the first term of each year.

2. **FOOD ECONOMICS.** One lecture and three laboratory periods each week. Four hours credit. By lecture and research work, the relative nutritive and money values of foods are considered. Each student prepares a weekly dietary for the family; the amount to be expended limited by the instructor. United States Agricultural Bulletin standards used. Laboratory work is a continuation of Course 1. Offered in second term of each year.

3. **EMERGENCY WORK AND HOME NURSING.** One lecture and three laboratory periods each week. Four hours credit. The lectures, demonstrations and practical work are designed to set forth the principles underlying good nursing, to take up the dietetic treatment of various diseases and to consider such emergency cases as frequently require prompt treatment in the home. Food suitable for invalids, infants and convalescents is prepared in the laboratory. Offered in the third term of each year.

4*a*. **PRESERVATION OF FOODS.** Four weeks.

b. **HYGIENE OF CLOTHING.** Eight weeks.

One lecture and three laboratory periods each week. Four hours credit.

(*a*). Includes a brief study of the causes of decomposition, a history of the methods employed in the preservation of foods, and practical work in canning, preserving, etc.

(*b*). Includes a study of fibres and their proper treatment. The properties and cleansing effect of water and soap; disinfecting clothing; the chemical treatment of stains and demonstrated work in practical laundry methods. Offered in the first term.

10. **HOUSEHOLD ECONOMICS.** Two hours lecture course. Elective. A consideration of the best location for a house; its hygienic and sanitary construction and arrangement and approved methods of lighting, heating and ventilating. Offered in the third term of each year.

DOMESTIC ART.

5. **LECTURES** on the Industrial and Artistic Evolution of Society. History of the early race considered with special reference to the development in culture gained through hand-work. Practice work; Preparations of a series of models comprising the different stitches used in plain hand sewing; ornamental stitches and simple embroidery. One lecture and three practice periods each week. Four hours credit. Second term.

6. **LECTURES ON TEXTILES.** Study of fibres; their growth and the processes of manufacture. Comparative economic values of fabrics. Practice work; Machine and hand work on underwear; drafting from simple measurements; designing in pencil; use of patterns; making shirt waists or wash gowns; Simple straw hats and bows. One lecture and three practice periods a week. Four hours credit. First term.

7. **LECTURES ON HISTORIC COSTUME.** Consideration of line, form and color; hygienic and artistic dress; treatment of wool and silk fabrics. Practice work : Drafting patterns by use of Tailoring System. Cutting and fitting. Making wool dress. Making of hat frames, covering and trimming the same. One lecture and three practice periods a week. Four hours credit. First term.
8. **LECTURE AND PRACTICE WORK.** Continuation of Course 7. As much time as possible being given to pencil and water coloring designing of costumes and hats suitable to different wearers. Original designs required to be made and carried out in the case of each individual pupil. One lecture and three practice periods a week. Four hours credit. Second term.
9. **LECTURES ON HISTORY OF DOMESTIC ART AND ARCHITECTURE AND THE APPLICATION OF ART TO MODERN HOUSE DECORATION.** Practice work: Continuation of Course 8. Further work in practical costume making as may be designated by the instructor; the aim being to foster good taste and judgment in the use of expensive and inexpensive materials. Expressions of individuality encouraged but held subservient to general artistic principles, to rules of hygiene and to prevailing modes. One lecture and three hours practice work each week. Four hours credit. Third term.

Note. Individual instruction is given throughout. Pupils are required to furnish all materials except those used in making models of Course 5. A certain amount of work is required to be completed before admittance is given to the next higher grade of work.

DRAWING

[HAYES HALL, Rooms 22, 24 and 37]

Associate Professor Bradford, Assistant Professor French, Mr. Lewis

1. **FREEHAND DRAWING.** Practice and occasional lectures. Pencil, charcoal, pen and water-color drawing from copies, models and plaster casts.
 One drawing period a week, three terms, Industrial Arts.
 Two drawing periods a week, first term, Short Mining and Domestic Economy.
 Two drawing periods a week, first and second terms; all four-year Engineering Courses.
 Three drawing periods a week, three terms, Architecture.
2. **LETTERING.** Practice and occasional Lectures.
 Two drawing periods a week, third term, Industrial Arts, and Short Mining.
 Three drawing periods a week, third term, Ceramics, Civil, Electrical, Mechanical and Mine Engineering, and Architecture.
 This Course must be preceded by Course 1.
3. **MECHANICAL DRAWING.** Lectures or recitations one period a week. Practice two periods a week. All Engineering, Industrial Arts, Architecture. Subjects: Orthographic, Isometric and Oblique Projection and elementary Working Drawings. First term.
 Lectures or recitations two periods a week. Practice one period a week, in Industrial Arts and in all Engineering Courses except Civil Engineering; three periods a week in Civil Engineering and Architecture. Subject: Descriptive Geometry. Second term.
 Lectures or recitations, one period a week. Practice, two periods a week in Engineering Courses; four periods a week in Architecture. Subject: Shades, Shadows and Perspective. Third term, in all four-year Engineering and Industrial Arts Courses and the Course in Architecture. First term in the Short Mining and Domestic Science Courses.
 This Course must be preceded by Course 2.

4. **DRAUGHTING AND BLUE-PRINTING.** Practice and occasional Lectures. Three periods a week, second term. Arranged especially for the students in the Short Mining Course. This Course must be preceded by the first term of Course (3).

5. **TECHNICAL DRAWING.** Lectures and Practice. Rules and methods for working drawings, tracing, blue-printing, machine design and practice in making same to represent form and dimensions for shop use. Three periods a week. First term, Mechanical and Electrical Engineering Courses. This Course must be preceded by Courses (2) and (3).

7. **PHOTOGRAPHY.** Lectures and Practice. Lectures: Optics of Photography, chemistry of photography, exposing and developing, printing, lantern slides, orthochromatic photography and some of the applications of photography. Practice in outdoor, interior, instantaneous and flash-light photography, copying, lantern slides, and printing. Two periods a week. Ceramics, Architecture, first term. Civil, Mechanical and Mine Engineering, third term. The first term of this Course is elective.

8. **MECHANICAL DRAWING.** Lectures and Practice. Geometric and Projection Drawing. Two periods a week, first and second terms, Industrial Arts.

10. **MECHANICAL DRAWING.** Lectures and Practice. Arranged especially for the students in Agriculture. Two periods a week, first term.

11. **MECHANICAL DRAWING.** Lectures and Practice. Arranged especially for the students in Short Course in Ceramics, five periods a week, third term.

12. **CLAY MODELING.** Modeling in Clay and Casting in Plaster, ornamental forms from designs, photographs, nature and original designs. Two periods a week; first, second and third terms.
This Course must be preceded by Course (1).
Domestic Economy Course, second term. Architectural Course, second and third terms. This Course must be preceded by Course (1).

13. **TECHNICAL AND DECORATIVE DESIGN.** Lectures and Practice. Lectures on the principles of decorative design in monochrome, color and relief, and practice in the same. Two periods a week; first, second and third terms.

14 **PEN DRAWING.** Two periods a week, first term. Arranged especially for the Course in Architecture. This Course must be preceded by Course (1).

15. **TECHNICAL DRAWING.** Lectures and Practice. House Designing. Five periods a week, third term. Domestic Economy.

16. **LECTURES AND PRACTICE.** Technical Drawing consisting of the designing and preparation of specifications of structures related to agriculture. Three periods a week, third term.

ART.

An elective course in Art offered by Department of Drawing. Must be preceded by Course 1 in Drawing or its equivalent elsewhere.

17. **LECTURES AND PRACTICE.** Lectures on color standards, color theory, color harmony, color appearances, tone and gradation, atmosphere and values. Practice in color work either water or oil color. First term. Lectures illustrated by lantern slides.

18. **LECTURES AND PRACTICE.** Lectures on objects of art, ideas and subjects, style and individuality, schools of art, great artists including old and modern masters. Illustrated by lantern slides. Practice in water or oil painting from still life. Second term.

19. **LECTURES AND PRACTICE.** Lectures will be a continuation of second term's work and including sculpture and the master sculptors. Illustrated by lantern slides. Practice in water or oil painting from life and nature or clay modeling. Third term. The above is to be offered as an elective for two or three hours as follows: Lecture for one hour and practice for two or four hours as the student has time.

ARCHITECTURE.

4. **SPECIFICATIONS.** Lectures and practice in preparing Specifications for Architectural Structures. Two periods a week. (Second Term, fourth year, Course in Architecture.)
5. **DECORATION AND ORNAMENT.** Lectures on the different styles of carved ornament and decorative color. The practice part of this subject will be incorporated in the clay Modeling and Designing. Three periods a week. (First Term, third year, Course in Architecture.)
6. **ESTIMATES AND SUPERINTENDENCE.** Lectures and practice in preparing estimates for structures designed in Courses 8, 11, 12 and 13, and the duties of superintendence. Four periods a week. (Third Term, fourth year, Course in Architecture.)
7. **HEATING, VENTILATING AND PLUMBING.** Lectures and experimental work. Lectures on the principles and methods of heating and ventilating and sanitary plumbing. Experimental work is carried on with the heating and ventilating plants in the different University buildings. Five periods a week. (Second Term, fourth year, Course in Architecture.)
8. **DESIGNING.** Lectures and Practice. Steel skeleton and fire proof construction. Five periods a week. (Second Term, fourth year, Course in Architecture.)
9. **HISTORY OF ARCHITECTURE.** Lectures illustrated by lantern slides. Three periods a week. (First Term, second year, Course in Architecture.)
10. Same as 9. (Second Term, second year, Course in Architecture.)
11. Same as 10. (Third Term, second year, Course in Architecture.)
12. **ARCHITECTURAL DRAWING.** Drawing architectural ornament, details of orders and styles with the special object of impressing upon the student's mind the architectural characteristics considered in Course 9. Two periods a week. (First Term, second year, Course in Architecture.)
13. Same as 12. (Second Term, second year, Course in Architecture.)
14. Same as 12. (Third Term, second year, Course in Architecture.)
15. **DESIGNING.** Lectures and practice in designing structures adapted to modern requirements. Four periods a week. (First Term, third year, Course in Architecture.
16. **DESIGNING.** Lectures and practice. Two periods a week. (Second Term, third year, Course in Architecture.)
17. **DESIGNING.** Lectures and practice. Four periods a week. (Third Term, third year, Course in Architecture.)
18. **DESIGNING.** Four periods a week. (First Term, fourth year, Course in Architecture.)
19. **DESIGNING.** Four periods a week. (Third Term, fourth year, Course in Architecture.)
20. **THESIS.** Original design, to be accompanied with written description, specifications and estimate. Five periods a week. (Third Term, fourth year, Course in Architecture.)

ECONOMICS AND SOCIOLOGY

[UNIVERSITY HALL, Rooms 17 and 18]

Associate Professor Clark.

Course 51 or Course 52 must precede all other Courses.

FIRST SEMESTER

51. **ELEMENTS OF POLITICAL ECONOMY.** A careful study of the laws of production, exchange, distribution and consumption of wealth; combined with an analysis of the industrial actions of men as regards land, labor, capital, money, credit, rent, interest, wages, etc. Text-book, lectures and individual investigations. Four times a week. This Course is repeated in the Second Semester (as Course 52). Students who are required to take the subject, those whose names begin with the letters L to Z will take it in the First Semester; others will take it in the Second Semester (as Course 52).

53. **THE HISTORY OF INDUSTRIAL SOCIETY.** A general view of the evolution of industrial society; and a study of causes and effects of past economic policies together with their bearing on existing conditions; with special reference to England and America. Lectures and assigned readings. Twice a week.

55. **PRACTICAL PROBLEMS IN ECONOMICS.** A rapid study of immigration, money, railroads, crises and tariff. Lectures and collateral readings. Twice a week.

57. **THE TRANSPORTATION PROBLEM.** A study of the development and present economic status of roads, canals and railroads in their relation to industry and to the state. Lectures. Twice a week.
Not offered in 1899–00.

59. **PUBLIC FINANCE AND TAXATION.** This course aims to make the student acquainted with the theory of public revenue and expenditure; and with the leading systems of financial administration throughout the world. Municipal indebtedness and corporate financiering are incidentally treated. Text-book and lectures. Twice a week.
Not offered in 1899–00.

61. **SEMINARY IN ECONOMICS.** Two hours a week at one meeting. All students who elect their Major Study in Economics must take this course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

63. **SOCIOLOGY AND STATISTICS.** Lectures and laboratory work. One hour credit. This course may accompany courses 55, 57, 59 or 65.

65. **COMMERCIAL GEOGRAPHY.** A scientific study of business relations and conditions, domestic and foreign; the sources, quantity and quality of products, and the distribution of the same; trade routes and the means of communication. The Consular Reports will constitute one basis of study. Texts and lectures.

SECOND SEMESTER

52. **ELEMENTS OF POLITICAL ECONOMY.** Text-book, lectures and individual investigations. Four times a week. (This is a repetition of Course 51, and will be taken in the Second Semester by those students (of whom it is required) whose names begin with the letters A to K.)

53. **THE HISTORY AND THEORY OF SOCIALISM.** Lectures and collateral readings. Twice a week.

56. **INDUSTRIAL AND SOCIAL REFORMS.** A study of labor problems, charities and corrections, monopolies, insurance, trusts, etc. Lectures and collateral readings. Twice a week.

58. **MONEY, CREDIT AND BANKING.** This course involves the history and theory of the subject; a comparative study of monetary systems, currency, etc.; together with various methods of banking; national banks, clearing houses, sub-treasury, etc.; and a critical analysis of proposals for reform. Texts, lectures and collateral readings. Twice a week.
Not offered in 1899–00.

60. **INDUSTRIAL AND FINANCIAL HISTORY OF THE UNITED STATES.** A complete survey of American industries, financial resources and policies; public lands, government subsidies, internal revenue, etc.; history and description of the Treasury and Interior Departments, the Mints, etc. Lectures and collateral readings. Twice a week.

62. **SEMINARY IN ECONOMICS.** Two hours a week at one meeting. This is a continuation of Course 61, and is open only to those who have had that course. All students who elect their Major Study in Economics must take this Course in their fourth year. Open, as elective, to other students, graduate and advanced under-graduate, on permission of the instructor.

64. **SOCIOLOGY AND STATISTICS.** A continuation of Course 63. One hour credit. May be taken separately or accompany Courses 56, 58, 60 or 66.
Courses 1 and 2 in the College of Agriculture and Domestic Science are the same as Courses 51 and 52 described above.

66. **COMMERCE AND TRADE.** Theory and practice of business. Standard business forms, commercial paper, stocks and bonds, insurance policies and investment securities of all kinds will be studied with the aid of sample copies. This is an advanced course and should be preceded by four elective courses in the department including Course 60. Required readings and reports on current commercial and financial literature. Lectures.

EDUCATION

[University Hall, Rooms 51 and 54]

Professor Gordy, Mr. Hamilton.

FIRST SEMESTER

51. **ELEMENTARY EDUCATIONAL PSYCHOLOGY.** This course is intended to be helpto three classes of students: (1) Those who are not preparing to teach, but who wish to make some study of education in order that they may perform their duties as members of society more intelligently: (2) Those intending to teach and who wish to study the relations between Psychology and education; and (3) Those preparing to be superintendents and who wish to get suggestions as to the best method of teaching Psychology to teachers. The text used is Gordy's Psychology. Students will be required to do collateral reading and bring in reports of their work. Four hours a week.

53. **HISTORY OF GREEK EDUCATION.** Students of this course will make a study of the history of the education of the Greeks from the time when life was their only school to the time when Greece became the teacher of the world. The connection between Greek life and Greek education will be sharply emphasized; the defects of Greek ideals of life will be shown as reappearing in Greek ideals and methods of education, and these in turn as exerting an influence on Greek life. This course will be essentially a study of Greek civilization, but with the practical purpose of getting light for the solution of our own problems. It is believed that the course will be especially helpful to those preparing to teach history, and the classics. The texts used are Davidson's *Greek Education*, and Davidson's *Aristotle*. Readings are required of students in Greek history and Plato's *Dialogues*. Four hours a week.

55. **THE HERBARTIAN PEDAGOGY.** The object of this course is three-fold: (1) To ascertain what the Herbartian Pedagogy is: (2) To determine its truth, and (3) To consider carefully its applicability—so far as it is true—to the schools of this country. Special attention will be given to these Herbartian theories that are most widely current in this country. The texts used are Herbart's *Science of Education*, De Garmo's *Herbart* and Lange's *Apperception*. Four hours a week.

59. **CHILD STUDY.** An elementary course in the growth and development of children, giving special attention to the pedagogical aspect of the subject. Though arranged primarily for teachers this course treats of subjects of universal interest such as the child as a social factor, function of play, the child and self-government, the child and the race, etc. Open to all students. Twice a week.

67. **EDUCATIONAL VALUES.** This course seeks to determine the capacity of the various subjects pursued in elementary and secondary courses to contribute to true educational ideals. The work is based on Fouillie's *Education from a National Standpoint*. Twice a week.

69. **A STUDY OF SCIENTIFIC METHOD**; intended especially for those preparing to teach Science. Twice a week.

71. **PEDAGOGICAL RESEARCH.** For teachers and advanced students. Various school problems will be taken up for exhaustive study, thus offering opportunity for an insight into the organization of the school not usually open to undergraduate students. The work will be by topics and largely individual. Special facilities for original investigation will be at the command of students showing themselves competent to do such work. As only a small number of students can be accommodated applications for admission should be made as soon as possible. Twice a week.

73. **MODERN EDUCATIONAL SYSTEMS OF EUROPE.** A brief historical and statistical study of secondary education in Germany, France and England. The work will be based upon such texts as Russel's *German Higher Schools*, Holman's *English National Education*, and will consist of recitations and reports upon original topics. Open to all students. Twice a week.

SECOND SEMESTER

52. **MODERN EDUCATIONAL THEORIES.** These theories will be studied from three points of view: (1) As the expression of a certain philosophy of life; (2) from the point of view of their consistency; and (3) from that of their truth. The work is based on Quick's *Educational Reformers*. Twice a week.

54. **PLATO'S REPUBLIC.** This course is essentially seminary work for the benefit of those students of Course 53 who wish to make a critical study of Plato's *Philosophy of Education*. Twice a week.

56. **THE KINDERGARTEN.** This course is intended especially for those who are preparing to do kindergarten and primary work, and to be superintendents of schools. Twice a week.

58. **THE PHILOSOPHY OF EDUCATION.** This course aims to make a systematic exposition of the philosophy of education. Four times a week.

60. **EDUCATION IN THE UNITED STATES.** A comparative study of secondary education in the United States and Europe presupposing Course 73. Twice a week.

68. A continuation of 67. Twice a week.

70. A continuation of 69. Twice a week.

72. **PEDAGOGICAL RESEARCH.** Continuation of Course 71. Open to students credited with 59 or 71. Twice a week.

ELECTRICAL ENGINEERING.

[ELECTRICAL HALL, Room 9 and Laboratory.]

Associate Professor Caldwell, Mr. Fish

6. **ELECTRICAL ENGINEERING.** Lectures on direct and alternating circuits, dynamo machinery, transformers, accumulators and applications. Twice a week. (First and Second Terms, third year, Course in Architecture; and fourth year, Courses in Industrial Arts and Manual Training.)

7. **ELECTRICAL ENGINEERING.** Laboratory work on the subjects treated in Course 6, which it accompanies. Twice a week. (First and Second Terms, fourth year, Courses in Industrial Arts, Manual Training, Mining and Mechanical Engineering; Second Term, third year, Course in Architecture; fourth year, Civil Engineering.)

8. **DIRECT CURRENT DYNAMO MACHINERY.** Generators and Motors, their theory, construction and operation. Lectures, recitations and problems. Four times a week. (Second Term, third year, Course in Electrical Engineering.)

9. **ELEMENTARY DYNAMO LABORATORY.** Handling and testing of circuits, generators, motors, accumulators, lamps, etc. Nine actual hours per week. (Third Term, third year, Course in Electrical Engineering.)

10. **ALTERNATING CURRENT CIRCUITS AND MACHINERY.** Generators, transformers, single and polyphase motors, apparatus and systems. Lectures, recitations and problems. Three times per week. (First and Second Terms, fourth year, Course in Electrical Engineering.)

11. **ADVANCED DYNAMO LABORATORY.** Continuation of the work begun in Course 12, together with alternate current apparatus, telephone apparatus, etc. (First and Second Terms, six actual hours. Third Term, with thesis work nine actual hours. Fourth year, Course in Electrical Engineering.)

12. **ELECTRICAL TRANSMISSION AND DISTRIBUTION.** Systems, operation and apparatus. Twice a week. (Second Term, fourth year, Course in Electrical Engineering.)

13. **APPLICATION OF ELECTRICITY.** Brief treatment of the elements of Illumination, Street Railway Work, Telephone, Telegraph, Electro-metallurgy, Mining, etc. The seminary method is used in this course to the extent of each student writing one paper on some assigned subject, and reading the same before the class. Five times per week. (Third Term, fourth year, Course in Electrical Engineering.)

14. **ELECTRICAL DESIGN.** Includes wiring of buildings, Direct and Alternate current generators, transformers, distribution, etc. Eight hours per week in the drawing room. (Second and Third Terms, fourth year, Course in Electrical Engineering.)

ENGLISH LITERATURE

[UNIVERSITY HALL, ROOM 31.]

Professor Barrows, Assistant Professor Taylor

All Courses except 51 and 52 are elective; but no elective is open to one who has not taken, or is not taking 51 or 52. Students, whose major study is in English literature must take 69 and 70, in either the third or fourth year. Biennial courses will alternate as follows: 53 with 61, 54 with 60, 63 with 71, 64 with 72.

FIRST SEMESTER.

51. **AN INTRODUCTION TO ENGLISH LITERATURE.** Four times a week.
Required in the Course of Arts, the Latin Course in Philosophy, and the Course preparatory to the study of Law and Journalism.
Course 51 includes (1) an outline of the history of English literature. For this part of the work Pancoast's "Introduction to English Literature" is covered in three examinations. (2) Lectures on the elements of literary analysis and interpretation. (3) Study of selections characteristic of different authors and of different periods, to secure acquaintance with literary problems, to cultivate perception of literary qualities, and to verify and apply the assertions of the lectures and of the manual. The book first used is Palgrave's "Golden Treasury."

53. **POETRY, FROM SPENCER TO MILTON,** exclusive of the drama. Twice a week. (Omitted in 1899–1900.) Historical and critical lectures; papers and discussions. Required books: "Spenser's Faery Queene" (Kitchin); "Elizabethan Lyrics" (Schilling): "Milton's Poetical Works."

55*a*. **THE ENGLISH BIBLE.** The Pentateuch. Once a week. Given in 1901–'02.

55*b*. **THE ENGLISH BIBLE.** The Histories. Once a week. Given in 1899–1900.

55*c*. **THE ENGLISH BIBLE.** The Gospels. Once a week. Given in 1900–1901.

The study of the Bible is continued through three years. The old authorized version is the text-book; but students must also have, for correction and comment, the revised version.

57. **SHAKSPERE.** Three times a week. Literary study of Shakspere's plays, with no more reference to historical and philological matters than is necessary to an understanding of the text. Various problems of dramatic art are discussed in connection with the plays that best illustrate them.

59. **THE MODERN NOVEL.** Three times a week. (Omitted in 1900–1901.) Lectures, reading and reports.

61. **FROM DRYDEN TO JOHNSON.** Twice a week. (Omitted in 1900–1901.) Lectures, reading and reports. Both prose and poetry will be reviewed in this course.

63. **PROSE. FROM COWPER TO THE VICTORIAN PERIOD.** Three times a week. (Omitted in 1899–1900.) Lectures on the history of thought in this period, on the relations of authors to each other and to the times, and on their literary significance. Critical study of selections from Burke, Coleridge, Landor and the essayists.

65. **MASTERPIECES: A STUDY OF LITERARY TYPES.** Three times a week. This with course 66 constitutes one continuous course. The course covers the whole field of English Literature topically. It is designed for graduates, but is open to undergraduates who have taken two elective courses in this department. The study is of literary types, their origin and development, the best examples in English being chosen for basis; the types will include the drama, the epic, the idyll, the lyric, and in prose the novel, the short story and the essay. The whole will be based upon Aristotle's "Poetics" and the theory of ideal literature; and will include lectures, readings and essays.

67 **CHAUCER.** Twice a week. The Prologue to the Canterbury Tales, and the most important of the tales will be read. The Morris–Skeat edition of the Prologue, and Skeat's edition of Chaucer's Works are required.

69. **LITERARY PROBLEMS.** Twice a week. A series of topical studies. Lectures and illustrative readings drawn from the entire range of our literature; reports and discussions.

Required in the third or fourth year of students whose major study lies in this department.

71. **VICTORIAN LITERATURE — PROSE.** Three times a week. (Omitted in 1900–1901.) Victorian prose, centering on the essayists,—Ruskin, Newman, Arnold, Pater, Stevenson, Lectures, readings and reports.

SECOND SEMESTER.

52. **AN INTRODUCTION TO ENGLISH LITERATURE.** Four times a week.

Required in the Modern Language and English Courses in Philosophy and in the Course in Commerce and Administration. See description of Course 51, of which this is a repetition.

54. **PROSE. FROM SIDNEY TO MILTON.** Twice a week. (Omitted in 1899–1900.) Lectures on the intellectual life, and the political, religious, and social problems of the period as they affected its literature; papers and discussions. Required books: Bacon's "Essays and Advancement of Learning" (Selby); Browne's "Religio Medici" (Camelot Classics); Cowley's "Essays" (Cassel's National Library); Fuller's "Wit and Wisdom" (R. T. S. Library). Sidney, Taylor and others will be investigated in the library.

56*a*. **THE ENGLISH BIBLE.** Course 55*a* continued. Given 1901–1902.

56*b*. **THE ENGLISH BIBLE.** The Psalms and Prophets. Once a week. Given in 1899–1900.

56*c*. **THE ENGLISH BIBLE.** The Acts and Epistles. Once a week. Given in 1900–1901.

The study of the Bible is continued through three years. The old authorized version is the text-book; but students must also have, for correction and comment, the revised version.

58. **THE DRAMA — FROM THE MIRACLE PLAYS TO THE CLOSING OF THE THEATRES.** Three times a week. Lectures on the Mysteries, the Moralities, the Interludes, the Rise of the Regular Drama, Shakspere and his Predecessors, Contemporaries and Successors. Select plays will be read by the class.

60. **THE DR MA — SINCE THE RESTORATION.** Twice a week. (Omitted 1900–1901.) Lectures, readings and reports.

62. **AMERICAN AUTHORS.** Three times a week. (Omitted 1900–1901.) Lectures, readings and reports.

64. **POETRY — FROM COWPER TO THE VICTORIAN PERIOD.** Three times a week. (Omitted in 1899–1900.) Lectures on the rise of the romantic spirit, on the history of thought in this period, and on the relation of the poets of the times and to current problems. Study of selections from Cowper, Burns, Wordsworth, Shelley and Keats.

66. **MASTERPIECES: A STUDY OF LITERARY TYPES.** Three times a week. Course 66 is a continuation of Course 65 and must be preceded by 65. See description of Course 65.

68. **THE GREAT TRANSLATIONS.** Twice a week. (Omitted in 1899–1900.) This is a graduate course, for the discussion of various problems of universal literature, and the investigation of the indebtedness of English to other literatures. Undergraduates must obtain permission to take this course.

70. **LITERARY PROBLEMS.** Twice a week. A continuation of Course 69, and required of students whose major study lies in this department.

72. **VICTORIAN LITERATURE — POETRY.** Three times a week. (Omitted 1900–1901.)

ENTOMOLOGY

(*See* Zoology and Entomology)

EUROPEAN HISTORY

(*See* History)

GENERAL CHEMISTRY

(*See* Chemistry)

GEOLOGY

[ORTON HALL, Rooms 1, 5, 4, 7 and 13]

Professor Orton, Associate Professor Prosser, Associate Professor Bownocker.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE.

FIRST SEMESTER.

53. **PALEONTOLOGY.** Careful training in systematic classification which may be used in the philisophical study of the development of plant and animal life, or as a means of becoming acquainted with the faunas and floras that characterize the various geological formations.

At first the student devotes some time to conchology, studying recent shells in which the characters used in classification are well preserved, and after this preliminary work, fossils are studied. Fossils afford the most reliable data for identifying and correlating geologic formations, and the critical study of faunas is a field especially adapted to independent research.

Laboratory, museum and field work. Two to five hours credit.

55. **PETROGRAPHY 1.** Laboratory and Lectures. Optical crystallography, with practical determination of rock-forming minerals, macroscopically and microscopically. Study of the igneous rocks in the hand specimen and thin section. Twice a week. The Sturtz rock collection and Voight Hochgesang thin sections of typical minerals and rocks will be carefully studied. Books of reference:—Mitchel Levy—*Les Minneaux des Roches;* Rosenbusch—*Mikroscopische Physiographie der Petrographisch Wichtigen Mineralien*, 3d ed.; *Mikroscopische Physiographie der Massigen Gesteine*, 2d ed.; Teall's *British Petography;* Spottiswoode's *Polarization of Light.* Prerequisites; Chemistry, 51 and 52; Metallurgy, 52 (Mineralogy and Crystallography).

59. **FIELD GEOLOGY.** Field and laboratory study of the geological formations readily accessible from Columbus. This course is intended to acquaint the student with the ordinary methods of field investigation, and involves the collection and identification of specimens, the measurement of geologic sections and the preparation of a report describing the region studied. Two to five hours credit.

61. **COSMICAL GEOLOGY.** Lithological Geology, Dynamic and Structural Geology, Books of reference used in preparation of the work: Green's Physical Geology, Geike's Text-book of Geology, LeConte's Elements of Geology, Hunt's Chemical Geology, Daubree's Geologic Experimentale. Three times a week.

63. **PHYSIOGRAPHY.** Study of the features of the earth's surface with special reference to North America; the agencies producing these features and geographical changes now in progress. Recitations, lectures, map-work, field excursions. Books used in preparation of work: Standard Works on Physical Geography; Russel's Rivers of North America; Lakes of North America; and Glaciers of North America; Shaler's Aspect of the Earth; Wright's The Ice Age of North America; The National Geographic Magazine; Maps of the Mississippi River Commission, etc. Twice a week.

SECOND SEMESTER.

54. Continuation of Course 53. These two Courses may be continued through a second year.

56. Continuation of Course 55. Twice a week.

58. **GEOGRAPHIC GEOLOGY.** The origin, development and destruction of topographic forms. Rivers, lakes, oceans, ice, and winds as agents modifying the surface of the earth. The great ice age in North America. [Primarily for teachers.]

Books of reference: Journal of Geology; American Geologist; The Great Ice Age; (Geike's) The Ice Age in North America; (Wright) The Reports of the United States Geological Survey; The Maps of the Mississippi River Commission, etc. Three hours per week. Lectures, recitations, map work. Third term.

60. **AREAL GEOLOGY.** Instruction in the methods of preparing geological maps and reports. The student compiles from a geological report a map with sections showing geologic structure, and later traces the outcrops and prepares a geological map of some region. Two to five hours credit.

62. **HISTORICAL GEOLOGY.** A general course in paleontological and stratigraphical geology with excursions and laboratory study of the Ohio Geological Reports and characteristic fossils. The development of organisms and the classification and distribution of the geological formations are considered. Continuation of Course 61. Lectures and recitations three hours.

64. Continuation of Course 63. Twice a week.

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY.

2. **GENERAL GEOLOGY.** Structural, historical and dynamical geology. Three hours lectures and recitations and four laboratory and field work. In the laboratory. Dana's Manual of Geology, the Ohio Geological Reports and characteristic fossils will be studied. In the field, specimens will be collected, sections measured, formations identified and the student will be given an idea of the methods of work pursued by a field geologist. Credit five hours. First term.

5. **ECONOMIC GEOLOGY.** The common minerals and rocks composing the earth's crust, their alteration and decomposition. Soils, their origin and classification; the soils of the United States and especially those of Ohio. Fuels: Coal, oil and gas. Building stones, limes and cements. Iron and the most useful metals. Three hours. Second term. Lectures and laboratory work.

1. **PHYSIOGRAPHY.** The probable origin of the earth and its relation to other heavenly bodies. The features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Recitations, lectures and map work. Five hours. **Third term.**

5. **GENERAL GEOLOGY.** Structural, Historical and Dynamical Geology. Three hours lectures and recitations and two hours laboratory and field work. In the laboratory the Ohio Geological Reports and characteristic fossils will be studied. In the field, sections will be measured, formations identified, specimens collected and the student given an idea of the method of work pursued by a field geologist. (Required in the first and second term of fourth year in the Long Course.)

6. **ECONOMIC GEOLOGY.** Lectures, Economic materials of stratified rocks, clay, limes, cements, coals, iron ores, phosphates, petroleum, etc. Economic materials derived from veins and igneous rocks, gold, silver, copper, mercury. Gems. Books of reference used by students in preparation of their work: Publications of U. S. Geological Survey, State Geological Surveys, Phillips' Ore Mining. Three times a week. (Required in second term of fourth year in Long Course.)

1. **PHYSIOGRAPHY.** Recitations, lectures, map work. The probable origin of the earth and its relations to other heavenly bodies. The features of the earth's surface and the agencies producing these. The atmosphere, climate, etc. Oceans, rivers and lakes. Five hours. Third term, first year. Short Courses in Mining, Clay-working; and second year, Short Course in Industrial Arts.

4. **ELEMENTARY GEOLOGY.** Recitations, lectures, laboratory work. Lithological, dynamical, structural and historical geology. Five hours. (Second term, second year, Short Course in Mining.)

5. **GENERAL GEOLOGY.** Structural, historical and dynamical geology. Three hours lectures and recitations and four hours laboratory and field work. In the laboratory Dana's Manual of Geology, the Ohio Geological Reports and characteristic fossils will be studied. In the field specimens will be collected, sections measured, formations identified and the student given an idea of the methods of work pursued by a field geologist. Credit five hours (First term, fourth year, Course in Architecture, Ceramics, Civil and Mining Engineering; and second year, Short Course in Clay-working.)

6. **ECONOMIC GEOLOGY.** Lectures and assigned reading. Economic materials of stratified rocks, clays, limes, cements, coals, iron ores, phosphates, petroleum and gas. Economic materials derived from unstratified rocks—gold, silver, copper, mercury, etc. Three hours. (Second Term, fourth year, Courses in Architecture, Ceramics, Civil and Mining Engineering; and second year, Short Course in Clay-working.)

7. **PETROGRAPHY.** Lectures and laboratory work. The ingenious, sedimentary, and metamorphic rocks,—their origin and classification. The volcanic rocks of the western United States,—their composition, structure and alteration products. The object of this course is to give the student a practical acquaintance with rocks. Two hours. (Second Term, fourth year, Course in Mining Engineering.)

GERMAN LANGUAGES AND LITERATURES

[UNIVERSITY HALL, Rooms 32 and 33]

Professor Eggers, Associate Professor Mesloh

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **ELEMENTARY GERMAN.** Four times a week.

53. **SCIENCE READING.** Twice a week.

55. **INTERMEDIATE GERMAN.** Lectures upon outline of German Literatrue. Reading of selections. Four times a week.

57. **THE GERMAN DRAMA.** Lectures and reading of Selections. Three times a week.

59. **FAUST I.** Twice a week. (Can be taken only by those who propose to take 60.)

61. **MIDDLE HIGH GERMAN.** Mediæval Epics. Twice a week.

63. **DEUTSCHER AUFSATZ.** Original compositions in German. Once a week.

65. **COLLOQUIAL EXERCISES.** For advanced students. Twice a week.

67. **GOTHIC.** Wright's Primer. The relation between Gothic and allied languages will be considered. Twice a week.

59. **OLD NORSE.** Lectures on Grammar and Reading of Sagas.
The last two courses will alternate.

71. **SANSKRIT.** Perry's *Primer*. Lectures introductory to the study of Indo-Germanic philology.

73. **MODERN GERMAN DRAMA.** Critical study of contemporary dramatists, Hauptmann, Sudermann and others, with references also to the dramas of Ibsen and other dramatists of Germanic countries. Lectures and reading. Composition. After 1901 this course will alternate with 57. Three hours a week.

75. **PHONETICS.** Lectures. The course is intended to give the student a knowledge of the various sounds of language and of the relations between them. One hour a week.

SECOND SEMESTER

52. Continuation of Course 51. Four times a week.

54. Continuation of Course 53. Twice a week. Courses 53 and 54 must have been preceded by Courses 51 and 52.

56. **GERMAN LITERATURE.** Lectures and reading of Selections. Four times a week. Course 55 must have been preceded by Courses 51 and 52.

58. **THE GERMAN PROSE.** Lectures and reading of Selections. Three times a week. 57 and 58 must have been preceded by 51, 52, 55 and 56.

60. **FAUST II.** Twice a week.

62. **MEDIÆVAL LYRICS.** Twice a week.

64. **DEUTSCHE KULTURGESCHICHTE.** Once a week.
Courses 59, 60, 61, 62, 63 and 64 can be taken only with the approval of Professor Eggers; and must have been preceded by Courses 51, 52, 55 and 56, or their equivalents.

66. **COLLOQUIAL EXERCISES.** For advanced students. Twice a week.

68. **OLD HIGH GERMAN.** Lectures on Grammar and Literature. Reading of Selections. Twice a week.

70. **COMPARATIVE GRAMMAR.** Lectures. Twice a week.
The last two courses will alternate.

72. Continuation of Course 71.

74. **MODERN GERMAN PROSE.** Lectures and reading. The great contemporary writers of prose in Germany will be discussed. Some of their critical and philosophical works will be read. References will be made to the great prosaists of other Germanic countries. This course will alternate after 1901 with 58. Three hours a week.

COLLEGE OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **ELEMENTARY.** Four times a week, through the year.
2. **SCIENCE READING.** Twice a week, through the year.
4. **GERMAN LITERATURE.** Four times a week, through the year.
5. **SCIENCE READING.** Four times a week. Open to those who have completed Course 1 or its equivalent. Required of all students who offer German as their entrance language.

GREEK LANGUAGE AND LITERATURE

[UNIVERSITY HALL, Room 37]

Prrofessor Smith, Associate Professor Hodgman

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

ELEMENTARY GREEK. White's *First Greek Book* and one or two books of Xenophon's *Anabasis*. This course is designed to meet, partially, the wants of those who are deficient in the Greek required for admission. It cannot receive University credit. Five times a week, through the year.

FIRST SEMESTER

51. **XENOPHON'S HELLENICA**, Books I, II (Manatt). Greek Prose Composition. Herodotus, Book VII. Four times a week.
53. **LYSIAS**, Select Orations (Morgan.) Attic Antiquities. Homer's *Iliad* (Seymour). Four times a week.
59. **LECTURES ON HISTORY OF ANCIENT ART.** Twice a week.
(Given biennially. Not offered in 1900–1901.)
61. **THE ATTIC DRAMA.** Lectures, collateral readings and quiz. Twice a week.
63. **LECTURES ON THE HISTORY OF MEDIÆVAL AND MODERN ART.** Twice a week.
(Given biennially. Not offered in 1901–1902.)
65. **LYRIC POETRY.** Selections from the Greek Lyric Poets. Twice a week.

SECOND SEMESTER

52. **HERODOTUS** (continued). Myers's History of Greece. Homer's *Odyssey* (Perrin). Four times a week.
54. **HOMER'S ILIAD** (continued). Plato's *Apology of Socrates*, *Crito*, and selections from *Phaedo*. Four times a week.
60. **LECTURES ON HISTORY OF ANCIENT ART.** Continuation of Course 59. Twice a week.
(Given biennially. Not offered in 1900–1901.)
62. **THE ATTIC DRAMA.** Continuation of Course 61. Rapid reading of two or three plays. Twice a week.
64. **LECTURES ON MEDIÆVAL AND MODERN ART.** Continuation of Course 63, Twice a week.
(Given biennially. Not offered in 1901–1902.)
68. **GREEK PRIVATE LIFE.** Lectures, illustrated by photographs and lantern-slides. Twice a week.

CLASSICAL PHILOLOGY

Courses 69–70. **HISTORICAL GRAMMAR.** These courses include lectures upon such topics as: The Indo-European family of languages; alphabets and pronunciation of Greek and Latin; accent and its effects as seen in vowel weakening, syncopation, etc.; vowel graduation; inflection of noun and verb; Grimm's Law and the associated laws; the passage of Latin into French and thence into English, etc. The courses include, also, the study of selected inscriptions, of a portion of Quintilian, Book I, and assigned reading in such manuals as Giles's Comparative Philology, and Thompson's Palæography. Twice a week through two semesters.
(Given biennially. Not offered in 1901–1902.)

HISTORY

AMERICAN HISTORY

[UNIVERSITY HALL, Rooms 27 and 18]

Professor Knight, Dr. J. B. Sanborn

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Course 55 (or 56) must precede all other courses in American History. All students intending to take advanced courses in American History should take English History (European History 153 and 154, Department of European History) as early as possible in their course.

FIRST SEMESTER

55. **POLITICAL HISTORY OF THE UNITED STATES.** Lectures, text-books, prescribed readings and topical reports. Hart's Formation of the Union; Wilson's Division and Reunion. Four times a week. This course is repeated in the Second Semester (as Course 56). Of students who are required to take this subject, those whose names begin with the letters from A to K will take it in the first semester; others will take it in the second semester (as Course 56). Two sections.

61. Seminary for Research Work in American History and Political Science. Two hours a week (at one meeting).
In 1900–1901 all fourth year students, who elect their Major Study in the departments of American History and Political Science must take this course. Open, as elective, to other students, graduate and advanced undergraduate, on permission of the instructor.

63. **AMERICAN COLONIAL HISTORY.** The political and social development of the American Colonies, the growth of colonial self-government and of the idea of union. Lectures, assigned readings and special reports. Three times a week.
(Given biennially. Not offered in 1900–1901.)

65. **CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES. 1850–1876.** Secessions, Civil War and Reconstruction; a study of the causes and the effects of the downfall of slavery. Lectures and assigned readings. Three times a week.
Given biennially. Offered in 1900–1901.)

71. **HISTORICAL MATERIAL AND ITS USE.** Lectures on elementary historical bibliography and the use of American historical documents, with practical exercises. Especially designed for students intending to do advanced work in American history and political institutions. Once a week.

All students electing their Major Study in the department of American History and Political Science are expected to take this course in their third year. Open as elective to others on permission of the head of the department.

73. **TERRITORIAL DEVELOPMENT OF THE UNITED STATES.** 1789–1850. Growth of the United States, the acquisition and settlement of new territories, and the effect of those territories on the life of the nation. Lectures and assigned readings. Twice a week.

56. **POLITICAL HISTORY OF THE UNITED STATES.** Lectures, text-books, prescribed readings and topical reports. Hart's Formation of the Union; Wilson's Division and Reunion. Four times a week. (This is a repetition of Course 55 and will be taken in the second semester by those students (of whom it is required) whose names begin with letters from L to Z.) Two sections.

62. **SEMINARY FOR RESEARCH WORK IN AMERICAN HISTORY AND POLITICAL SCIENCE.** Two hours a week (at one meeting).

This is a continuation of Course 61, and is open to those only who have had Course 61. In 1900–1901 all fourth year students electing their Major Study in the department of American History and Political Science must take this course. Open, as elective, to other students, graduate and advanced undergraduates, on permission of the instructor.

64. **CONSTITUTIONAL AND POLITICAL HISTORY OF THE UNITED STATES.** The Formative Period, 1776–1815. An advanced course covering the organization and establishment of the United States as a nation. Lectures, assigned readings and special investigations. Three times a week.
(Given biennially. Not offered in 1900–1901.)

66. **AMERICAN DIPLOMATIC HISTORY.** History of the foreign relations, policy and treaties of the United States. Lectures and special investigations. Three times a week.
(Given biennially. Offered in 1900–1901.)

72. **TOPICAL RESEARCH IN AMERICAN HISTORY.** The preparation of special topics on the basis of the work of Course 71. Some special period of American History will be taken up each year. Once a week.

Open to those who have had Course 71. All students electing their major study in the department of American History and Political Science are expected to take this course in their third year.

74. **TERRITORIAL DEVELOPMENT OF THE UNITED STATES, 1850-1900.** A continuation of Course 73. Particular attention will be paid to the country west of the Mississippi, and to the growth of American interests in the Pacific. Lectures and assigned readings. Twice a week.

COLLEGE OF ENGINEERING

56. **POLITICAL HISTORY OF THE UNITED STATES.** Lectures, text-books and prescribed reading. Hart's *Formation of the Union;* Wilson's *Division and Reunion.* Two sections. Four times a week. (Last half Second Term and Third Term, third year, Courses in Industrial Arts and Manual Training.)

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

5. **POLITICAL HISTORY OF THE UNITED STATES.** Lectures, text-books and prescribed readings. Hart's *Formation of the Union;* Wilson's *Division and Reunion.* Four times a week during the first term and the first half of the second term. Two sections. The aim of this course is to give the student such knowledge of the political history of the United States as shall make for intelligent citizenship and a clearer understanding of current political conditions.

EUROPEAN HISTORY

[UNIVERSITY HALL, Rooms 7, 17, 36]

Associate Professor Siebert

Courses 151 and 152, in the order named, must precede all other courses in European History, except Courses 153, 154 and 157.

FIRST SEMESTER

151. **GENERAL HISTORY OF EUROPE TO THE CLOSE OF THE MIDDLE AGES.** Lectures, text-book and collateral readings. Adams, Civilization during the Middle Ages. Three times a week. Two sections.

153. **POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND TO THE ACCESSION OF THE STUARTS.** Lectures, text-book and assigned readings. Gardiner's Student's History of England. Three times a week.

155. **HISTORY OF EUROPE FROM 1789 TO 1815.** The French Revolution. Lectures, recitations and collateral reading. Stephen's Europe, 1718–1815. Three times a week.

157. **ROMAN HISTORY AND INSTITUTIONS.** Lectures and text-book. Pelham, History of Rome. Twice a week.

159. **HISTORY OF EUROPEAN COLONIES.** A study of colonial development of Portugal, Spain, England, the Netherlands, France and Germany during the fifteenth, sixteenth and seventeenth centuries. Lectures, collateral readings and special reports. Twice a week.
Omitted in 1900–1901.

161. **HISTORY OF FRANCE TO THE MIDDLE OF THE EIGHTEENTH CENTURY.** Lectures, assigned readings and special reports. Given biennially. Omitted in 1900–1901.

SECOND SEMESTER

152. **GENERAL HISTORY OF EUROPE FROM THE MIDDLE AGES TO THE PRESENT TIME.** Lectures, text-book and collateral reading. Schwill's History of Modern Europe. Three times a week. Two sections.

154. **POLITICAL AND CONSTITUTIONAL HISTORY OF ENGLAND FROM THE ACCESSION OF THE STUARTS TO THE PRESENT TIME.** Lectures, text-book and assigned readings. Gardiner's Student's History of England. Three times a week.

156. **HISTORY OF EUROPE SINCE 1815.** Lectures, text-book and assigned readings. Fyffe's Modern Europe. Three times a week.

158. **HISTORY OF THE PERIOD OF THE PROTESTANT REFORMATION.** Lectures and text-book. Hauser's Era of the Reformation. Twice a week.

160. **HISTORY OF EUROPEAN COLONIES.** History of colonization by the important States of Europe during the eighteenth and nineteenth centuries. Lectures, collateral reading and special reports. Twice a week.
Omitted in 1900–1901.

162. **DOCUMENTARY AND BIBLIOGRAPHICAL STUDIES IN EUROPEAN HISTORY.** Lectures, readings and criticism of documents, and investigations. Given biennially.
Omitted in 1900–1901.

HORTICULTURE

[HORTICULTURAL HALL]

Professor Lazenby, Mr. Price.

1. **ELEMENTS OF HORTICULTURE.** Lectures, text-book and laboratory work in garden, orchard and green-house. A study of the principles of plant growth and culture, preparation of soil, drainage and irrigation, weeds and insects. Four times a week. First term.

a. **GREENHOUSE, CONSTRUCTION AND MANAGEMENT.** A study of the different types of plant houses, including methods of heating, ventilating and watering. The vegetable forcing house, and the crops grown therein. Lectures, recitations and laboratory work in greenhouse. Four times a week. Second term.

b. **PLANT PROPAGATION.** The theory and practice of multiplying plants by seeds, cuttings, divisions, layers, budding and grafting. A study of special garden crops, including fertilizers, tools and implements. Practice in transplanting, pollinating and the use of insecticides and fungicides. Lectures and laboratory work in garden and orchard. Four times a week. Third term.

5. **VARIETIES OF FRUIT.** A study of the history, characteristics, adaptation and general qualities of orchard and garden fruits, including their commercial and food value. Practice in judging and scoring apples, pears, peaches, grapes, citrous and nut fruits. Lectures, recitations and laboratory exercises. Four times a week. First term.

6. **PRINCIPLES OF FRUIT CULTURE.** A study of the location, tillage and fertilizing of fruit lands; the selection of varieties, laying out and planting of fruit grounds; the care of fruit plantations, including diseases, insects and fungi; spraying and the use of insecticides and fungicides; harvesting, preserving and marketing fruit. Lectures and recitations four times a week. Second term.

7. **SMALL FRUIT CULTURE.** A study of the varieties and methods of culture of the small or bush fruits. Practice in cross-pollinating, judging and scoring of small fruits; the relation of bees and birds to horticulture; insect enemies; fungus diseases and the theory and practice of spraying. Lectures, recitations and laboratory work in garden and orchard. Four times a week. First term.

8. **ELEMENTS OF FLORICULTURE.** A study of the origin, history, classification, general characteristics and development of ornamental plants. Lectures and laboratory work. Twice a week. First term.

9. **COMMERCIAL FLORICULTURE.** A study of the propagation and culture of ornamental plants, including the general management of plant houses, the marketing of cut flowers and bedding plants. Lectures, recitations and laboratory work. Twice a week. Second term.

10. **AMATEUR OR HOME FLORICULTURE.** Including the study of window gardening and general management of house plants; the out-door flower garden and treatment of flower beds and borders. Lectures, recitations and laboratory work. Twice a week. Third term.
11. **ARBORICULTURE.** A study of native and introduced trees and shrubs; their use for timber, ornament, shade, shelter and hedges; methods of propagation and culture. Lectures and field work. Twice a week. First term.
12. **FORESTRY AND SYLVICULTURE.** A study of the influence of forests upon soils, crops and climate; forestry in Europe; value of trees for timber; establishment and management of small plantations of forest trees; how to improve and extend existing woodland. Lectures and laboratory work. Twice a week. Second term.
13. **LANDSCAPE GARDENING.** A study of the art of producing picture-like or landscape effect; the making of lawns, walks and drives, and the correct planting of trees, shrubs and flowers for the external adornment of home and public grounds. Lectures and practice. Twice a week. Third term.

INDUSTRIAL ARTS AND SHOPWORK

[HAYES HALL, Rooms 9, 12, 17, 18, 5 and 6]

INDUSTRIAL ARTS

Professor Sanborn, Mr. Knight, Mr. Renck, Mr. Crowe, Mr. McIntire

1. **TOOLS, MACHINES.** Lectures and recitations on hand and machine tools and the principles of mechanism and mechanics underlying their design, construction and operation. Three times a week.
2. **DESIGNING.** Problems in drawing and design to accompany Course 1. Three drawing periods a week.
3. **SHOP EQUIPMENT, APPLIANCES AND MANAGEMENT.** A continuation of Course 1. Lectures and recitations on the strength and durability of the materials used in construction; shop and factory buildings and their construction; power, power transmission and prime movers; automatic machines and other special devices for turning out cheap and accurate work: methods of compensation and shop accounts and management. Three times a week.
4. **ADVANCED DESIGNING.** Problems in the design of buildings and the arrangement of machinery, line-shafting, etc., for manufacture plants; to accompany Course 3. Three drawing periods a week.
5. **WORKSHOPS AND APPLIANCES.** Lectures and problems on the construction of shop buildings and the arrangement of machinery; power required and the means of transmission: friction in line-shafting and the efficiency of machinery: automatic machines and special shop appliances. Three times a week.
6. **MACHINE DESIGN.** Application of the principles of mechanics and strength of materials to the problems of machine designing. Five times (ten hours' practice) a week.

SHOPWORK

1. **CARPENTRY AND PATTERN MAKING.** Exercises and practice in carpentry, wood-turning and pattern making, including sawing, planing, mortising, splicing, framing and other work involving the use of the ordinary carpenter tools; center and chuck turning; the making of finished patterns; and enough elementary moulding to illustrate draft, parting, cores, etc.

2. **FORGING.** Exercises and practice in iron and steel forging, including such operations as drawing, bending, forming, upsetting, welding and the making and tempering of punches, drills, chisels, lathe tools and springs.

3. **FOUNDRY WORK.** Exercises and practice in tempering sand and preparing moulds of machine parts in the sand, core-making, melting iron and brass, and the pouring of castings.

4. **CHIPPING AND FILING.** Exercises and practice in vise work, including chipping in cast and wrought iron; surface filing, squaring, fitting, finishing, and the scraping of surface plates.

7. **CARPENTRY AND PATTERN MAKING.** Similar to Shopwork 1.

8. **CARPENTRY: CABINET WORK.** Exercises and practice in cabinet making including panelling, mitre and dovetail joints, etc.; use of power tools.

9. **ADVANCED PATTERN MAKING.** Continuation of pattern work of Shopwork 7.

11. **FORGING.** Similar to Shopwork 2.

12. **ADVANCED FORGING.** Tool making, tempering of taps, dies, cutters, etc.; annealing; case hardening; ornamental iron work, etc.; visits to shops.

13. **MACHINE WORK.** Exercises and practice in hand-turning in iron and brass on speed lathes; and straight and taper turning, boring, fitting, chucking, thread-cutting, etc., on engine lathes.

14. **MACHINE WORK.** Exercises and practice on the lathe, planer, shaper, drill press and milling machine, with use of small tools as drills, taps, dies, reamers, counterbores, etc.; construction of parts of actual machines.

15. **ADVANCED MACHINE WORK.** Exercises and practice on turret lathe, universal, surface and tool grinding machines, gear cutting, etc.

16. **ADVANCED MACHINE WORK.** The construction and use of jigs and templates; the accurate laying out of work; the duplication of parts, the production of work rapidly and economically, etc.

17. **ADVANCED MACHINE WORK.** The making and use of special tools and fixtures, standard plugs and collars, standard caliper and limit guages; error limits in modern machine construction; methods of testing the accuracy of machine tools; etc.

SHOPWORK REQUIRED

Number	Credit	Year	Term	Courses in
3	2	2	1	M. E.: I. A. (short).
	3	2	1	I. A.: Man. Tr.
4	2	2	1	E. E.
	3	3	1	I. A.: Man. Tr.
	3	2	1	I. A. (short).
	3	2	2	M. E.
	2	1	3	Clay-work (short).
	2	2	3	E. M.
	3	4	1	Cer.
7	3	1	1	I. A. (short).
	3	2	1	Chem.: I. A.: Man. Tr
	2	2	1	E. M.
	4	1	3	E. E.: M. E.
8	5	2	3	I. A.: Man. Tr.
9	3	2	2	I. A.: Man. Tr.
	3	1	2	I. A. (short).
11	2	2	1	E. E.
	3	2	1	M. E.
11	2	2	2	E. M.
	3	2	2	Chem.: I. A.: Man. Tr.
	3	1	3	Clay-w'k (short): I. A. (short)
	3	2	3	Mining (short).
	3	3	3	Cer.
12	3	2	3	I. A.: Man. Tr.
13	3	2	2	E. E.
	3	3	2	I. A.: Man. Tr.
	5	2	2	I. A. (short).
	3	2	3	M. E.
14	3	3	1	M. E.: E. E.
	3	3	3	I. A.: Man. Tr.
15	3	4	1	I. A.: Man. Tr.
	4	3	2	M. E.
	5	2	3	I. A. (short).
16	3	4	2	I. A.: Man. Tr.
17	3	4	3	I. A.

LATIN

[UNIVERSITY HALL, Rooms 29, 28 and 39]

Professor Derby, Associate Professor Hodgman, Assistant Professor Elden

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 51, 52, 53, and 54 in the order named must precede the Elective Courses 55, 56, 57, 58, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78.

FIRST SEMESTER

51. **LIVY — BOOKS XXI AND XXII; TERENCE**—*Pharmio.* Four times a week.

53. **HORACE** — *Odes;* **CATULLUS** — *Selections;* **TACITUS** — *Agricola.* Four times a week.

55. **ROMAN HISTORIANS** —**TACITUS** — *Historiae;* **SUETONIOUS.** Three times a week.

57. **ROMAN PHILOSOPHY.** Three times a week. (Not offered in 1900–1901.)

59. **PHARMACEUTICAL LATIN.** Five times a week.

61. **LINGUISTICS AND INSCRIPTIONS.** Two times a week. (Not offered in 1900–1901.)

63. **TEACHERS' COURSE.** Two times a week.

65. **ROMAN RHETORIC AND ORATORY.** Three times a week.

67. **GREEK AND ROMAN ANTIQUITIES.** Lectures, illustrated. Two times a week.

69. **CICERO'S PHILOSOPHY.** *Tusculanae Disputationes, De Finibus.* Three times a week.

71. **LATIN LITERATURE.** Once a week.

73. **ROMAN POLITICAL AND LEGAL ANTIQUITIES.** Once a week.

75. **LATIN WRITING.** Twice a week.

77. **LATIN PROSEMINARY.** Three hours a week.

SECOND SEMESTER

52. **EARLY LATIN COMEDY** — **PLAUTUS** — Mostellaria: **CICERO** — *Selected Letters.* Four times a week.

54. **PLINY'S** *Letters;* **TIBULLUS, PROPERTIUS, OVID.** Four times a week.

56. **ROMAN SATIRE.** Three times a week.

58. **JUVENAL. MARTIAL.** Three times a week.

60. **PHARMACEUTICAL LATIN** — Continuation of Course 59. Five times a week.

62. Continuation of Course 61. Two times a week.

64. Continuation of Course 63. Two times a week.

66. **LATER LATIN WRITERS.** Three times a week.

68. **GREEK AND ROMAN ANTIQUITIES.** Lectures, illustrated. Two times a week.

70. **SENECA,** *Selections;* **PLAUTUS,** two plays. Three times a week.

72. Continuation of Course 71. Once a week.

74. Continuation of Course 73. Once a week.

76. Continuation of Course 75. Twice a week.

78. Continuation of Course 77. Three hours a week.

COLLEGE OF PHARMACY

1. **PHARMACEUTICAL.** Five times a week. First, second and third terms.

LAW

[UNIVERSITY HALL]

FIRST YEAR

FIRST SEMESTER

Elementary Law (Robinson, Walker and Blackstone).

SECOND SEMESTER

Agency (Mechem); Contracts (Bishop); Criminal Law (Hawley); Sales (Tiedeman); Torts (Cooley).

SECOND YEAR

FIRST SEMESTER

Bailments (Hale); Commercial Law (Tiedeman); Evidence (Underhill or Greenleaf); Pleading (Phillips).

SECOND SEMESTER

Construction of Contracts (Jones); Partnership (Parsons); Real Property (Tiedeman); Wills (Schouler).

THIRD YEAR

FIRST SEMESTER

Constitutional Law (Black); Private Corporations (Taylor); Municipal Corporations (Tiedeman); Equity Jurisprudence (Fetter).

SECOND SEMESTER

Ethics (Sharswood); Insurance (Richards); Negligence of Municipal Corporations (Jones); Suretyship (Baylies.)

MATHEMATICS

[UNIVERSITY HALL, Rooms 39, 41, 43 and 45]

Professor Bohannan, Associate Professor McCoard, Assistant Profesor Arnold, Assistant Professor Swartzel, Mr. Rasor, Miss Ball

A. TERM COURSES

1. **ELEMENTARY ALGEBRA.** *Venable.* Five times a week. First term (Short Course in Agriculture.)
3. **PLANE GEOMETRY.** *Venable.* Five times a week. First or second terms.
3*a*. **PLANE GEOMETRY.** *Venable.* Five times a week. Second term. (Short Courses in Agriculture and Clay-working.)
13. **SOLID GEOMETRY.** *Venable.* Five times a week. Second term.
14. **PLANE TRIGONOMETRY.** *Loney.* Five times a week. First or third terms.

15. **ANALYTICAL AND SPHERICAL TRIGONOMETRY.** *Loney*, with notes on Spherical Trigonometry. Twice a week. Second term.

16. **COLLEGE ALGEBRA.** *Taylor.* Three times a week. Second term.

17. **PLANE ANALYTICS.** *Loney.* Five times a week. Third term.

18. **ANALYTICS AND DIFFERENTIAL CALCULUS.** *Loney, Venable, Edwards.* Five times a week. First term.

19. **DIFFERENTIAL CALCULUS.** *Edwards.* Five times a week. Second term.

20. **INTEGRAL CALCULUS.** *Edwards.* Five times a week. Third term.

11. **DIFFERENTIAL EQUATIONS.** *Edwards.* Once a week. First term.

8. **LEAST SQUARES.** *Merriman.* Twice a week. First term.

B. SEMESTER COURSES

FIRST SEMESTER

55. **PLANE TRIGONOMETRY** (*Loney*) and 57, **ALGEBRA.** (*Taylor*). Five times a week.

59. **ANALYTICS** (*Loney, Venable*) and 61, **DIFFERENTIAL CALCULUS** (*Edwards*). Five times a week.

63. **ADVANCED MATHEMATICS.** Topics will be changed from year to year to meet the wishes of the students. Selections may be made from the following courses: (a) Advanced Calculus (*Picard Houel*); (b) Differential Equations (*Johnson, Murray, Forsythe, Craig*); (c) Higher Plane Curves (*Salmon*); (d) Advanced Analytical Geometry (*Casey, Salmon*); (e) Analytical Geometry of Three Dimensions (*Chas. Smith, Frost, Salmon*); (f) Theory of Equations (*Burnside and Panton*); (g) Modern Higher Algebra (*Chrystal Salmon, Serret, Cole's Netto*); (h) Modern Geometry (*Cremona, Reye, Steiner, Von Staudt, Chasles*); (i) Determinants (*Muir*); (j) Elliptic Functions (*Weber, Halphen, Durege, Hermite, Greenhill, Briot and Bouquet*); (k) General Theory of Functions (*Forsythe, Harkness and Morley, Tannery, Weierstrass, Durege, Thoame, Biermann*); (l) Potential Functions (*Clausius, Riemann, Dirichlet, Peirce*); (m) Mathematical Theory of Electricity (*Mascart and Joubert*); (n) Higher Geodesy (*Clarke, Helmert, Jordan*); (o) Spherical Harmonics (*Byerly, Ferrers, Heine*); (p) Mathematical Optics; (q) History of Mathematics. Credit, one to ten hours.

65. **PROBLEMS ON ALL PAST WORK.** Once a week.

67. **ALGEBRA, ANALYTICS, CALCULUS.** Three times a week. Taylor's College Algebra.

SECOND SEMESTER

56. **ALGEBRA** (*Taylor*), and 58, **PLANE ANALYTICS** (*Loney*). Five times a week.

60. **CALCULUS** and 62, **DIFFERENTIAL EQUATIONS** (*Edwards.*) Five times a week.

64. Continuation of Course 63. Credit, one to ten hours.

66. Continuation of Course 65. Once a week.

68. **TRIGONOMETRY, ANALYTICS, CALCULUS.** Three times a week. Lyman and Goddard's Trigonometry.

MECHANICAL ENGINEERING

[HAYES HALL, Room 12; MECHANICAL HALL, Second Floor]

Professor Magruder, Associate Professor Hitchcock, Mr. Hale, Mr. Grate

3. **MECHANISM.** Lectures and recitations on the principles of mechanism and mechanical movements. Five times a week. (Second Term, third year, Mechanical and Electrical Engineering Courses.)

The accurate laying out of movements, embodying the principles of mechanism. Twice a week. (Third Term, third year, Course in Mechanical Engineering.)

6. **ANALYTICAL MECHANICS.** Five times a week. (First and Second Terms, third year, Courses in Architecture, Ceramics, and Civil, Electrical, Mechanical and Mining Engineering.)

7. **STRENGTH OF MATERIALS.** Recitations and lectures on the elastic and ultimate resistance of the materials of engineering to stress and their use in structures and machines. Lectures on elementary hydraulics and the flow of water through orifices and pipes over weirs, and in streams, and on measuring the same. Five times a week. (Third Term, third year, same as 6.)

12. **EXPERIMENTAL ENGINEERING LABORATORY.** Twice a week. (First Term, third year, Course in Mechanical Engineering.)

14. The same. Four times a week. (Second Term, fourth year, Course in Mechanical Engineering.)

15. The same. Three times a week. (Third Term, fourth year, Course in Mechanical Engineering.)

17. The same. Three times a week. (Second Term, fourth year, Course in Civil Engineering.)

18. **MACHINE DESIGN.** Recitations on Unwin's Machine Design, with lectures on American Practice. Five times a week. (First and Second Terms, fourth year, Course in Mechanical Engineering.)

19. **MACHINE DESIGN.** Practical applications of the principles of machine design. Five drawing periods a week. (Third Term, fourth year, Course in Mechanical Engineering.)

21. **THESIS WORK.** Five times a week. (Third Term, fourth year, Course in Mechanical Engineering.)

22. **TIMBER AND MASONRY.** Lectures on the construction of foundations and structures in timber and masonry. Five times a week. (The last three-fifths of Second Term, third year, Courses in Mechanical Engineering and Industrial Arts.)

23. **MATERIALS OF CONSTRUCTION.** Lectures on the materials used in architecture and building construction, and laboratory exercises on their properties. Four times a week. (First Term, fourth year, Course in Architecture.)

24. **EXPERIMENTAL ENGINEERING LABORATORY.** Three times a week. (First and Second Terms. Elective to third and fourth year engineers.)

35. The same. Five times a week. (Third Term, fourth year, Courses in Civil and Mining Engineering.)

27. The same. Five times a week. (First Term, fourth year, Course in Mechanical Engineering.)

28. The same. Twice a week. (Third Term, third year, Course in Electrical Engineering; First Term, fourth year, Course in Industrial Arts; and Third Term, Course in Manual Training.)

29. The same. Three times a week. (First Term, fourth year, Course in Electrical Engineering.) Twice a week. (Second Term, fourth year, Course in Industrial Arts.)

30. The same. Twice a week. (Second Term, fourth year, Course in Electrical Engineering; Third Term, fourth year, Course in Industrial Arts.)

31. **HYDRAULIC MACHINERY.** Recitations and lectures on pumping machinery. Three times a week. (Third Term, fourth year, Course in Mechanical Engineering.)

32. **MECHANICAL ENGINEERING AND POWER PLANTS.** A descriptive study of steam and gas engines, boilers, pumps, injectors and other machinery used in plants generating power. Five times a week. (Third Term, third year, Courses in Mechanical and Electrical Engineering; Third Term, fourth year, Courses in Industrial Arts and Manual Training.)

33. **STEAM ENGINES AND BOILERS.** A detail study of steam using and steam generating machinery. Five times a week. (First Term, fourth year, Courses in Mechanical and Electrical Engineering.)

34. **THERMODYNAMICS.** Lectures and recitations on the transmutations of heat and mechanical energies in steam, gas and air engines, and in air and ammonia compressors, together with a study of the tests of ideal and actual engines and of their indicator diagrams; the flow of gases through pipes and orifices. Five times a week. (Second Term, fourth year, Course in Mechanical Engineering.)

METALLURGY AND MINERALOGY

[CHEMICAL HALL, Rooms 4 and 3]

Professor N. W. Lord, Mr. Somermeir

COLLEGE OF ENGINEERING

2. **MINERALOGY.** Lectures. Similar to Course 52 in College of Arts, Philosophy and Science, but more practical, and arranged so as to be preparatory to Determinative Mineralogy (Course 3). Three times a week. Third term.

3. **DETERMINATIVE MINERALOGY.** Laboratory course in practical determination of minerals by physical and chemical tests. Each student is furnished with a set of apparatus, and works under an instructor's inspection. Brush's *Determinative Mineralogy* is used as a manual. Five times a week. Third term.

4. **METALLURGY.** A course of lectures upon fuel and its uses, iron and steel, copper, lead, gold and silver, their properties, tests, ores and details of the modes of reduction. The lectures are supplemented by a careful study of references to standard works and journals. Five times a week. First and second terms.

5. **METALLURGICAL LABORATORY.** Lectures and laboratory work. Laboratory practice in the analysis of iron and steel, fuel and slags, and the assays of lead, copper and zinc ores by wet methods, using approved methods as practiced in technical laboratories of metallurgical works. Course 5 must be preceded by Agricultural Chemistry, Courses 1, 8, 9; or by General Chemistry, Courses 7 and 12. Five laboratory periods a week. Three terms.

6. **ASSAYING.** Laboratory work. Practical work in the assaying of gold, silver and lead ores, by furnace methods. Oral instruction, with reference to standard books on assaying. Five laboratory periods a week. Second term.
7. **METALLURGICAL CONSTRUCTION.** Practice in the designing of furnaces and other metallurgical machinery, including detail drawings and estimates. Three times a week. First term. (Professors Lord and Ray.)
8. **ORE DRESSING AND COAL WASHING.** Lectures. Instruction in the methods of concentrating and enriching ores and fuels by mechanical means. Lectures with reference to Rittinger's *Aufbereitung;* Callon's *Course d' Exploration des Mines;* Kunhardt's *Ore Dressing*, and various papers in technical journals. Twice a week. First term.
9. **MINERAL CHEMISTRY.** Lectures and laboratory practice. Lectures upon fire damp, mine explosions, explosives, boiler, waters, poisonous gases, iron ores; iron and steel, their properties and modes of manufacture; coal and coke. Five hours a week. Third term.

MILITARY SCIENCE AND TACTICS

[ARMORY]

Major J. M. Burns, U. S. A., Retired

1. **MILITARY DRILL.** Three times a week through the year.
2. **TACTICS.** Lectures and recitations. Twice a week. Second term.
3. **ART OF WAR.** Lectures and recitations. Twice a week. Second term.

MINE ENGINEERING.

[CHEMICAL HALL, Room 26]

Associate Professor Ray

ELEMENTARY ALGEBRA. (Mathematics 2.) Wentworth. Five times a week. Three terms.

1. **MINE SURVEYING.** Lectures and field practice. This is similar to Course 4, but more elementary. The same text is used. The students have more practice in the drawing-room. Five times a week. First term.
2. **VENTILATION AND HAULAGE.** Lectures illustrated by experiments and maps of mines and models when possible, tests by safety lamps and anemometers, and solution of air distribution in coal mines. Five times a week. Second term.
3. **MINE OPERATING.** A course of lectures and practical instruction in mine book-keeping and accounts, cost of working, etc., particularly adapted to Ohio coal mining. Five times a week. Third term.
4. **MINE SURVEYING.** Field Practice in the use of instruments for surface and underground surveys. Full notes are taken, and maps and plans made in the drawing-room. Davie's *Surveying*, by Van Amringe, is used as a text-book. Five times a week. First term.
5. **MINE ENGINEERING.** Lectures. Mine operating, mining machinery, ventilation, shaft-sinking, working out deposits, etc. Constant reference is required to the standard works and to the leading technical journals, with practice in designing mine plants, draughting and estimates. Five times a week through the year.
6. **PLANS AND SPECIFICATIONS.** Five times a week. Third term. [Professors Lord and Ray.]

PHARMACY

[CHEMICAL HALL, Rooms 13 and 12]

Professor Kauffman, Assistant Professor Landacre, Assistant Professor Dye

6. **PHARMACY.** General pharmaceutical processes. Lectures three times a week. First term.
7. **PHARMACY.** United States Pharmacopeia official preparations. Lectures twice a week. Laboratory practice daily. Second term.
8. **DISPENSATORIES.** Official preparations. Lectures twice a week. Laboratory practice daily. Third term.
9. **PHARMACEUTICAL CHEMISTRY.** Unofficial preparations. The National Formulary. Lectures twice a week. Laboratory practice daily. First term.
10. **EXTEMPORANEOUS PHARMACY.** Prescription practice. Lectures once a week. Laboratory practice three times a week. Second term.
11. **GENERAL PRACTICE.** Lectures twice a week. Dispensing practice daily. Prescription practice daily. Third term.
12. **MATERIA MEDICA.** Official drugs and classification. Three times a week. First term.
13. **MATERIA MEDICA.** Official and unofficial drugs. Three times a week. Second term.
14. **MATERIA MEDICA AND THERAPEUTICS.** Snythetic Products. Poisons and Antidotes. Three times a week. Third term.
15. **PHARMACEUTICAL ASSAYING.** Three times a week. First term.
16. **METHODS OF MANUFACTURE.** Three times a week. Second and third terms.
17. **GENERAL PHARMACY.** Two lectures, three laboratory periods a week. Through the year.
18. **LABORATORY.** Special work for veterinary students. Five times a week. Third term.

PHILOSOPHY

[UNIVERSITY HALL, Rooms 33, 50, 49 and 51]

Professor Scott, Mr. Hamilton

FIRST SEMESTER

51. **GENERAL PSYCHOLOGY.** Logic Begun. Four times a week. Required in the Courses for B. A., B. Ph. (L), and B. Ph. (M. L.)
53. **GENERAL PSYCHOLOGY.** Three times a week. Required in the Courses for B. Ph. (E.), B. Sc., for Law and Journalism.
55. **ETHICS.** Three times a week. Required in Course for B. Ph. (E.).
57. **HISTORY OF ANCIENT AND MEDIÆVAL PHILOSOPHY.** Three times a week. Elective after Courses 51 and 52.
59. **INTRODUCTION TO PHILOSOPHY.** Twice a week. Elective after Courses 51, 52, 56 and 57 or after Courses 53, 54, 55 and 56.
61. **PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY.** Twice a week. Elective. This course begins with a general survey of the organic basis of personality, attention, etc., taking up in turn the sense organs and perception, motor processes and the personal equation.
63. **LEADING WORKS IN PHILOSOPHY.** Twice a week. Elective on the same conditions as Course 59.

SECOND SEMESTER

52. **LOGIC COMPLETED, ETHICS.** Four times a week. Follows Course 51.

54. **LOGIC.** Three times a week. Follows Course 53.

56. **HISTORY OF MODERN PHILOSOPHY.** Three times a week. Required after Course 55. Also elective after Courses 51 and 52.

60. **METAPHYSICS.** Twice a week. Elective after Courses 51, 52, 57 and 56 or after Courses 53, 54, 55 and 56.

62. **PHYSIOLOGICAL AND EXPERIMENTAL PSYCHOLOGY.** Twice a week. Elective. The work of this semester presupposes Course 61. Individual topics will be assigned and the student will be required to report upon the general literature of the subject as well as to make an experimental study of some of the controverted points.

64. **LEADING WORKS IN PHILOSOPHY.** Twice a week. Elective on the same conditions as Course 60.

PHYSICS

[UNIVERSITY HALL, Rooms 10, 14, 23 and 24]

Professor Thomas, Assistant Professor Boyd, Mr. Kester

COLLEGES OF AGRICULTURE, ENGINEERING AND PHARMACY

1. **ELEMENTARY PHYSICS.** Recitations and experimental lectures. Five times a week. First and Second Terms. Text: Carhart & Chate's "Elements of Physics." (Required in all Short Courses.)

2. **MECHANICS AND HEAT.** Electricity and Magnetism, Sound and Light. Lectures and recitations. Three times a week. Through the year.

3. **PHYSICS.** Extension of Course 2, with practice in solution of problems. Twice a week. Through the year.

4. **ELECTRICITY AND MAGNETISM.** Lectures and recitations. Three times a week First term. (Third year, Electrical Engineering).

5. **PHYSICAL LABORATORY.** Elementary manipulation. Length, mass and time measurements. Work in density, elasticity and heat. Three times a week. Second and third terms.

6. **PHYSICAL LABORATORY.** Theory and practice of magnetic and electrical measurement, including the testing and standardizing of instruments; conductivity of conductors; insulation, capacity and resistance of insulated conductors and cables; temperature co-efficients; commercial measuring and testing instruments; strength and distribution of magnetic fields, magnetic moments, permeability: work in light including optical constants; spectroscopy; photometry of gas, electric and other lights. Five times a week. First, second and third terms. (Third year, Electrical Engineering.)

7. **PHYSICAL LABORATORY.** Two to three times a week. Through the year. Course 7 must be preceded by Course 2.

9. **PHYSICAL LABORATORY.** A second year's work in the Physical Laboratory. Three times a week, with five hours' credit. Course 9 must be preceded by Course 7.

The work in the Physical Laboratory begins with exercises in length, mass and time measurement, making use of scales, tapes and bars, micrometer screws, micrometer microscopes, the dividing engine, the cathetometer, the balance, chronometers, chronoscopes, etc. This course is intended to give the student facility in the use of instruments and knowledge of the theory of their construction and adjustment.

The determination of various physical constants follows, with elementary exercises in heat, light, electricity and magnetism; after which the student takes up such advanced work as his taste and skill permit. The experimental work is accompanied by instruction in methods and in the discussion of results.

11. **MECHANICS, SOUND AND HEAT.** One lecture, two laboratory periods a week. Required in the Course in Pharmacy.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

FIRST SEMESTER

51. **MECHANICS, HEAT, ETC.** Three times a week. Second year. Science Course. Elective in the first year of the Courses of Arts and Philosophy.

53. **MECHANICS, SOUND AND HEAT.** One lecture, two laboratory periods a week. Elective in the First year of the Courses of Arts and Philosophy.

55. **LABORATORY.** Three to five times a week.

57. **LABORATOXY.** Three to five times a week. Course 57 must be preceded by Course 55.

59. **THEORETICAL PHYSICS.** Five times a week. Lectures and assigned readings. Graduate and advanced undergraduate course.

61. **LABORATORY.** Five hours a week. To be preceded by Courses 55, 56, 57 and 58.

SECOND SEMESTER

52. **ELECTRICITY, MAGNETISM, ETC.** Three times a week. Follows Course 51.

54. **ELECTRICITY, MAGNETISM, ETC.** One lecture, two laboratory periods a week. Follows Course 53.

56. **LABORATORY.** Continuation of Course 55.

58. **LABORATORY.** Continuation of Course 57.

62. **THEORETICAL PHYSICS.** Five times a week. Follows Course 59.

64. **LABORATORY.** Five hours a week. Continuation of Course 61.

PHYSIOLOGY

(*See* Anatomy and Physiology)

POLITICAL ECONOMY

(*See* Economics)

POLITICAL SCIENCE

[UNIVERSITY HALL, Room 27]

Professor Knight

(All Courses in Political Science must be preceded by History 55 or 56)

FIRST SEMESTER

51. **INTERNATIONAL LAW.** Lectures and text-book. A study of public international law. Lawrence's *Principles of International Law.* Twice a week. (Given biennially. Not open in 1900–1901.)

53. **POLITICAL INSTITUTIONS OF THE UNITED STATES.** Lectures and recitations. A study of the origin, nature and workings of the political institutions of the United States, and an analysis of the form and powers of the government. Bryce's *American Commonwealth.* Three times a week.

55. **GOVERNMENT OF DEPENDENCIES.** A study of the political institutions of the leading colonial governments. Lectures, assigned readings and special reports. Twice a week.
(Given biennially. Not offered in 1900–1901.)

SECOND SEMESTER

52. **MUNICIPAL GOVERNMENT.** Lectures, collateral readings and special reports. A study of the development and status of modern municipalities, and a comparative study of recent American municipal charters. Twice a week. This Course forms a good sequent to Political Science 55, but is not dependent upon it.

54. **COMPARATIVE POLITICAL INSTITUTIONS OF EUROPE AND AMERICA.** Lectures, recitations, collateral readings and special reports. A comparative study of the political institutions and governmental forms and powers in the United States, England, Germany, France and Switzerland. Three times a week. Course 54 must be preceded by Course 53.

56. **HISTORY OF TREATIES AND MODERN DIPLOMACY.** A study of the leading treaties of modern times with special reference to their bearing upon international law. Accompanied by collateral reading and special reports. Twice a week. This course must be preceded by Course 51.

RHETORIC AND ENGLISH LANGUAGE

[UNIVERSITY HALL, Rooms 38, 40, 42, 44, 55.]

Professor Denney, Assistant Professors Graves, McKnight, Allen, Mr. Parker

Courses 51, 52, and either 53 or 54 are fundamental; Courses 55, 56, and 60, are advanced courses in composition; Courses 57, 58, 75 and 76 are advanced courses in public speaking; Courses 69, 70, 71, 72, 73 and 74 are philological; Courses 67 and 68 are pedagogical. Courses 59, 61, 62, 73 and 74 are usually found suitable for graduate students as well as for advanced undergraduates. Further courses of study exclusively for graduate students are arranged at the beginning of each year to meet individual needs and purposes.

FIRST SEMESTER

51. **ENGLISH COMPOSITION.** Three times a week. Credit two and one-half hours.

(a) Scott and Denney's "Paragraph Writing." Themes. Twice a week.

(b) Oral Practice. Once a week with the instructor in public speaking.

53. **STUDIES IN EXPOSITION.** Four times a week.

(a) Rhetorical analysis of prose; with essay-writing. Three times a week.

(b) Oral composition. Once a week with the instructor in public speaking. Course 53 must be preceded by Course 52.

55. **RAPID WRITING.** Once a week. The preparation of articles for the press, with exercises in observation, reporting, abstracting, condensation, expansion, interviewing, proof-reading, correspondence, and a study of newspaper forms. A special course for students preparing for journalism. Open to those who have passed Course 53 or 54.

57. **BRIEF MAKING AND ARGUMENTATION.** Three times a week. Practice in making briefs of noted speeches and original briefs for debate; lectures on logical analysis, evidence and argumentation. Class debates once a week, criticised by the instructor in public speaking. Course 57 must be preceded by Course 53 or 54.

59. **POETICS.** Twice a week. Lectures, prescribed readings, and reports. Gummere's "Hand-book" and Aristotle's "Theory of Poetry" used for reference. Course 57 must be preceded by Course 53 or 54.

61. **RHETORICAL THEORY.** Two hours a week. Lectures on the principles of style, and theories of rhetoric as historically developed, accompanied by special investigations of rhetorical problems with reports and discussions. An introduction to methods of research and the use of material. Exclusively for advanced undergraduates and graduates, who are making their theses in one of the English Departments.

67. **TEACHERS' COURSE IN RHETORIC.** Two hours a week. Lectures, conferences and prescribed readings on the teachings of composition and rhetoric in the schools. A special course for teachers and those intending to teach. Open only to advanced undergradutes, and to teachers who hold auditors' tickets.

69. **HISTORY OF THE ENGLISH LANGUAGE.** Twice a week. Emerson's "Brief History," with lectures and reading.

71. **OLD ENGLISH PROSE.** Twice a week. Bright's "Anglo-Saxon Reader." Course 71 must be preceded by Courses 69 and 70.

73. **OLD AND MIDDLE ENGLISH PHILOLOGY.** Two hours a week. Course 73 must be preceded by Courses 71 and 72.

75. **EXTEMPORE SPEAKING.** Two hours a week. Speaking from briefs and topical outlines on subjects previously mastered. Course 75 must be preceded by Courses 57 and 58.

SECOND SEMESTER

52. **ENGLISH COMPOSITION.** Three times a week. Credit two and one-half hours.

(a) Cairns' "The Forms of Discourse." Themes. Twice a week.

(b) Oral Practice. Once a week with the instructor in public speaking. Course 52 must be preceded by Course 51.

54. **STUDIES IN EXPOSITION.** Four times a week. Repetition of Course 53. Course 54 must be preceded by Course 52.

56. **RAPID WRITING.** Once a week. Continuation of Course 55, and must be preceded by Course 55.

58. **BRIEF-MAKING AND ARGUMENTATION.** Three times a week. Continuation of Course 57 and must be preceded by Course 57.

60. **SHORT STORIES.** Twice a week. Lectures, prescribed readings, reports, and practice under criticism. A study of the plan, purpose, diction, and structure of selected narratives, with plot analysis. Course 60 must be preceded by Course 53 or 54.

62. **PROBLEMS IN CRITICISM.** Two hours a week. Special research work, reports and a thesis. Course 62 must be preceded by Course 61.

68. **TEACHERS' COURSE IN ENGLISH LANGUAGE AND GRAMMAR.** Two hours a week. A special course for those engaged in teaching and those intending to teach. Open only to advanced undergraduates, and to teachers who hold auditors' tickets.

70. **DEVELOPMENT OF ENGLISH PROSE.** Twice a week. A rapid survey of the history of English idiom, with lectures and readings. Course 70 must be preceded by Course 69.

72. **OLD ENGLISH PROSE AND POETRY.** Continuation of Course 71 and must be preceded by Course 71.

74. **OLD AND MIDDLE ENGLISH PHILOLOGY.** Continuation of Course 73 and must be preceded by Course 73.

76. **EXTEMPORE SPEAKING.** Continuation of Course 75 and must be preceded by Course 75.

COLLEGES OF AGRICULTURE AND DOMESTIC SCIENCE, ENGINEERING AND PHARMACY

6. **ADVANCED RHETORIC.** Twice a week.

A. Prescribed readings in the literature of technology and science; and the analysis of specimens of this literature. Once a week.

B. Reports, abstracts, memoranda, and notes of lectures and of articles in the technical journals; practice in drawing specifications and writing brief papers on technical and scientific subjects. Once a week.

Two hours a week. (First, Second and Third Terms, second year, Courses in Industrial Arts, Manual Training, and Electrical and Mechanical Engineering; third year, Courses in Architecture, Ceramics, Chemistry, and Civil and Mining Engineering.)

5. **ENGLISH COMPOSITION.**

A. Scott and Denney's Paragraph-Writing; Macaulay's Warren Hastings; Cairn's Forms of Discourse; Themes. Twice a week.

B. Oral practice with the instructor in public speaking. Once a week.

(First, Second and Third Terms, first year.) Three times a week. Credit two and one-half hours. All four-year courses.

4. **ADVANCED COMPOSITION.** Twice a week. Elective.

ROMANCE LANGUAGES AND LITERATURES

[UNIVERSITY HALL, Rooms 35 and 34.]

Professor Bowen, Assistant Professor Bruce

The Department of Romance Languages and Literature offers courses of instruction and research in the three leading languages of the group whose origin is to be traced to the Latin or Roman idiom. These three languages are the French, Italian and Spanish. The foremost place in the work of the Department is naturally assigned to the French. In the study of this language the first desideratum is a thorough reading knowledge, which shall lead directly to the study of the literature. For all the languages taught in this department, it is assumed that the highest educational value lies in the acquiring of the ability to read them intelligently, to translate them correctly, to understand, appreciate and compare the various phases of their literatures, and to grasp the principles of their historic development. The practical side of the work, that which deals mainly with the acquiring of the ability to speak these languages with accuracy and ease, is regarded as supplementary, and as such receives due attention.

Exclusive of library facilities, the Department possesses, as aids in illustrating and supplementing the work, the following collections: Complete set of maps (including Paris); illustrated volumes showing various phases of the arts and sciences, costumes and manners, public instruction, dramatic representations, etc., in France at different epochs; large photographs and engravings of the principal French writers; collections of French prose extracts for use in sight reading.

I. FRENCH

FIRST SEMESTER

51. **ELEMENTARY FRENCH.** Four hours a week. Grammar: Edgren's (Part I), Grandgent's Essentials, or Joynes' Minimum, with written exercises. Reader: Super's (from Part II) or Whitney's (Parts I and II) or Kuhns' French Reading for Beginners. In this course the study of the language is taken up from the beginning. Stress is laid at first upon the acquisition of a correct pronunciation, after which the entire energy of the student is directed toward the attainment of a full and accurate reading knowledge of the language. Grammar and composition are made to contribute to this end.

53. **SCIENCE READING.** Two hours a week. A course introductory to the vocabulary of scientific literature, designed to familiarize the student with technical terms and style. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

55. **MODERN FRENCH LITERATURE.** Four hours a week. Contes and Novels: Bercy's *Contes et nouvelles modernes.* Balzac, Eugénie Grandet. Prose Composition: Edgren's French Grammar [Syntax] or Chardenal's French Exercises for Advanced Pupils. Lectures supplement the work: private reading required; systematic attention given to syntax and idiom. Open to those who have completed Courses 51 and 52, or who have received credit for French as an entrance subject.

57. **FRENCH COMEDY.** Three hours a week. Study of the growth of French Comedy, with work centering upon Molière [four plays], Regnard [le Joueur] and Beaumarchais [le Barbier de Séville]. Lectures and collateral reading. Open to those who have completed Courses 55 and 56.

59. **ADVANCED PROSE COMPOSITION.** One hour a week. Practice in speaking and writing French. Intended for advanced students who desire special training on the practical side of the language. Open to those who have completed Courses 55 and 56.

61. **FRENCH TRAGEDY.** Three hours a week. Racine and Voltaire. Lectures and readings, with assigned topics, reports and discussions. Part of the lectures given in French. Practical work continued. An advanced Course intended for students who have completed Courses 57, 58, 59 and 60. Any others must have the special consent of the head of the Department.

63. **FRENCH LITERATURE BEFORE THE SEVENTEENTH CENTURY.** Three hours a week. Special study of la Chanson de Roland. General Survey of the Old French period. Critical study of Montaigne [De l'institution des enfans]. Lectures (partly in French) on the literature of the sixteenth century. Assigned topics and reports. An advanced Course with the same conditions as in Course 61.

(Given biennially. Not offered in 1900–1901.)

65. **LITERARY CRITICISM IN FRANCE.** Two hours a week. Readings and lectures. Selections from Sainte-Beuve, Lemaitre, Brunetière and others. Open to those who have completed Courses 55 and 56.

SECOND SEMESTER

52. **MODERN PROSE AND PLAYS.** Continuation of Course 51. Four hours a week. Historical and narrative prose; one or more prose comedies. Sight reading is emphasized.

54. **SCIENCE READING.** Continuation of Course 53. Two hours a week.

56. **MODERN FRENCH LITERATURE.** Continuation of Course 55. Four hours a week. Lyric Poetry: Bowen's Modern French Lyrics. Drama: Comparative study of the classical and the romantic drama: Corneille, Horace; Hugo, Hernani. Private reading: Hugo's la Chute.

58. **RECENT FRENCH PROSE.** Three hours a week. Rapid reading with lectures. Critical study of some of the leading prose writers of the present, such as Bourget [Selections ed. Van Daell], Coppée [On rend l' argent], Daudet [le Nabab], Zola [la Débacle]. Open to those who have completed Courses 55 and 56.

60. **ADVANCED PROSE COMPOSITION.** Continuation of Course 59. One hour a week.

62. **CHATEAUBRIAND AND THE PRECURSORS OF THE ROMANTIC MOVEMENT.** Three hours a week. Lectures and readings, with assigned topics, reports and discussions. Part of the work conducted in French. Practical drill continued. An advanced course intended for students who have completed Courses 57, 58, 59, 60 and 61 (or 63.) Any others must have the special consent of the head of the Department.

64. **THE DEVELOPMENT OF THE FRENCH NOVEL.** Three hours a week. An advanced course with the same plan of work and the same conditions as in Course 62.

(Given biennially. Not offered in 1900–1901.)

Courses 62 and 64 are supplemented, toward the close of the year, by several lectures on: Methods of teaching French and the teacher's equipment.

66. **FRENCH TRAVEL-WRITERS.** Two hours a week. Readings and lectures. Scenes of travel from Gautier, Hugo and Dumas. Open to those who have completed Courses 55 and 56.

II. ITALIAN

51. **GRAMMAR AND READINGS.** Two hours a week. First Semester. Grandgent's or Edgren's Italian Grammar and Bowen's First Italian Readings. Open to those who have completed Courses 51 and 52 (or an equivalent) in French.

52. **GOLDONI AND DANTE.** Continuation of Course 51. Two hours a week. Second Semester.

(Italian is given biennially. Above Courses not offered in 1899–1900.)

III. SPANISH

51. **GRAMMAR AND READINGS.** Two hours a week. First Semester. Edgren's Spanish Grammar and Matze's First Spanish Readings.

52. **MODERN PROSE AND DRAMA.** Continuation of Course 51. Two hours a week. Second Semester. Alarcón el Capitán Veneno (Ford); Galdós, Dona Perfecta; Cortina, el Indiano. Brief talks on Spanish literature and philology.

(Spanish is given biennially. Above Courses not offered in 1900–1901.)

SANSKRIT

(*See* Germanic Languages)

SHOPWORK

(*See* Industrial Arts)

SOCIOLOGY

(*See* Economics and Sociology)

VETERINARY MEDICINE

[VETERINARY HOSPITAL AND TOWNSHEND HALL]

Professor White, Dr. Lavery, Dr. Frederick, Dr. Brumley

COLLEGES OF VETERINARY MEDICINE AND AGRICULTURE

11. **VETERINARY ANATOMY:** Osteology. Lectures illustrated with skeletons and anatomical preparations. Dissections. Five times a week First term.

12. **MYOLOGY, SPLANCHNOLOGY.** Practical dissections and demonstrations on cadavers. Five times a week. Second term.

13. **ANGIOLOGY AND NEUROLOGY.** Lectures illustrated by drawings, in the dissecting room, and on anatomical models. Five times a week. Third term. Books recommended for reference and study: Strangeway's Veterinary Anatomy (new edition); Chauvau's Comparative Anatomy; McFaydean.

14. **GENERAL PATHOLOGY AND MORBID ANATOMY.** Lectures four times a week. First term. Text-book: Green's Morbid Anatomy.

15. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Sporadic, non-infectious diseases. Four times a week. Second term.

16. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Four times a week. Third term.

17. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Four hours a week. First term.

18. **THEORY AND PRACTICE OF VETERINARY MEDICINE.** Infectious and contagious diseases. Four times a week. Second term. Text book: Friedberger and Froehner

19. **GENERAL THERAPUETICS.** Lectures. Five times a week. Third term.

20. **GENERAL SURGERY.** Lectures and demonstrations on the use of antiseptics in wound healing; suturing and bandaging; use of local and general anæsthesis, etc. Five hours a week. First term.

21. **SURGICAL DISEASES'** Lectures; illustrated by practical demonstrations, by drawings, on clinical cases. Head and neck. Five hours a week. Second term.

12. **SURGICAL DISEASES.** Continuation of 21. Trunk and limbs. Five hours a week. Third term.

23. **SURGICAL DISEASES.** Continuation of 22. Five hours a week. First term.

24. **OPERATIVE SURGERY.** Practical operations on narcotized subjects Three hours a week. Second term. Text books: Moeller; Liautard; Fleming.

25. **PRINCIPLES OF HORSESHOEING.** Lectures and demonstrations. Includes diseases of the foot and pathological shoeing. Four hours a week. First term. Text book: Dollar.

26. **MEAT INSPECTION.** Lectures and recitations. Text book: Peter's Meat Inspection.

27. **CANINE DISEASES.** Lectures and recitations. Three times a week. First term.

28. **CANINE DISEASES.** Continuation of 27. Three times a week. Second term. Text book: Mueller Glass.
29. **VETERINARY OBSTETRICS.** Lectures, recitations, and clinical practice. Three hours a week. Second term. Text books: Fleming; Dalrymple.
30. **OPHTHALMOLOGY.** Diseases of the Eye. Two hours a week. Third term.
31. **CLINIC IN THE VETERINARY HOSPITAL:** Stationary and Ambulatory. Daily at 10 to 12 m. Students of the second and third years are required to take part in the clinics. First, second and third terms.
32. **DISEASES OF THE COW:** Special Course for dairy students. Three times a week. Second term.
33. **VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS.** Veterinary anatomy. Five times a week. First term.
34. **VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS.** Contagious and non-infectious diseases. Five hours a week (one hour devoted to practical, clinical work). Second term.
35. **VETERINARY MEDICINE FOR AGRICULTURAL STUDENTS.** Contagious and non-infectious diseases. Five hours a week (one hour devoted to practical, clinical work). Second term.

ZOOLOGY AND ENTOMOLOGY

[BIOLOGICAL HALL, Rooms 3, 4, 7, 8, 9 and Third Floor]

Professor Osborn, Assistant Professor Hine, Mr. Landacre

COLLEGE OF AGRICULTURE

1. **INVERTEBRATE AND VERTEBRATE.** Three times a week. Invertebrate, first and second term; Vertebrate, third term. This course includes a general discussion of groups, dissection of types and an outline of classification. Especial attention is given to forms of economic importance either from their detrimental effects on crops, stock, etc., or from their utility in various industries or as domesticated species.
3. **ECONOMIC ENTOMOLOGY.** Insects of Forest, Orchard and Garden. Three times a week. Third term. A detailed study of injurious species intended particularly for students of Horticulture. The work includes field studies, collections, reports on observation, etc.
4. **ECONOMIC ENTOMOLOGY.** Twice a week, through the year. This Course must be preceded by Course 1. A systematic study of the group of insects with special reference to injurious and beneficial species. A foundation is laid for special study in Entomology. Preparation of collections, essays, life history studies and use of remedial measures along with laboratory studies on general anatomy and class recitations and lectures.
7. **SYSTEMATIC AND PRACTICAL ENTOMOLOGY.** Two lectures and one laboratory period a week. Third term. An elementary practical Course for students in the Short Course in Agriculture.
8. **PARASITES OF DOMESTIC ANIMALS.** A lecture course devoted to the principal parasitic animals affecting domestic animals intended especially to meet the needs of those who intend to give particular attention to stock raising. Once a week. First term.
9. **SPECIAL ENTOMOLOGY.** Studies of life-histories, collection and classification in selected groups. Field work and lectures. Four periods each week. Elective. Fall term.

10. **SPECIAL ENTOMOLOGY.** Studies of winter condition of Insects, Insecticides, Insecticide machinery, Methods of preparing insect illustrations, Greenhouse pests, etc. Four periods each week. Elective. Winter term.

11. **SPECIAL ENTOMOLOGY.** Investigations of selected groups or species. Lectures on Insects legislation, distribution, natural enemies, special methods of control, etc. Four periods each week. Elective. Spring term.

Courses 9, 10 and 11 are intended as practical courses in entomological research adapted especially for those who wish to give special attention to this branch with reference to future work in Agriculture or Horticulture and to furnish a preparation for those who have in view work as entomological investigators in experiment stations or as teachers in agricultural schools. They may be taken as graduate courses if not elected earlier or continued as special lines of research during a graduate course embracing other special subjects.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

Courses 57, 58, 59, 60, 61, 62 must be preceded by 51 and 52, 53 and 54, 64 or Zool. 1, of College of Agriculture.

FIRST SEMESTER

41. **COMPARATIVE ZOOLOGY.** Two lectures and one laboratory period a week. This course includes studies of types of different groups, discussions of principles and an outline of classification. Thomson's "Outlines" used as a basis.

53. **COMPARATIVE ANATOMY OF VERTEBRATES.** A laboratory course. Two laboratory periods and one quiz each week; devoted to Osteology, Myology, Splanchnology, Neurology and a full study of certain type forms. Weidersheim's "Comparative Anatomy of Vertebrates" is followed as a basis.

55. **COMPARATIVE ANATOMY OF VERTEBRATES.** A laboratory course. Four laboratory periods and one quiz each week. Similar to 53, but more extended.

57. **ZOOLOGY AND ANATOMY.** Advanced laboratory. Three laboratory periods a week.

On entering this course one may choose his work from any of the following lines:

(*a*). **ANATOMY OF THE FROG.** The guides used are Ecker's "Anatomy of the Frog," and Huxley and Martin's "Practical Biology." Both the gross anatomy and the histology will be studied, the student himself preparing the tissues, as directed; as time may permit, comparisons will be made with other Amphibia.

(*b*). **COMPARATIVE ANATOMY OF INVERTEBRATES.** The manuals used are: Shipley's "Invertebrate Zoology," Lang's "Text-book of Comparative Anatomy," McMurrich's Invertebrate Morphology" and Parker and Haswell's "Text-book of Zoology."

(*c*). **INVERTEBRATE EMBRYOLOGY.** Text-book, Translation of Korschelt and Heider's "Embryology of Invertebrates."

(*d*). **VERTEBRATE EMBRYOLOGY.** The embryology of the chick or frog will be thoroughly studied as a basis; this will be followed by a study of the embryology of the fish, amphibian, and mammal. The course aims to give thorough drill in embryological and histological technique. The books used are Foster and Balfour's "Elements of Embryology," and the works of Hertwig, Minot, Balfour and Marshall.

(e). **COMPARATIVE NEUROLOGY.** This is a course in the anatomy and histology of the central nervous system, and will include a study of the brain and spinal cord of all classes of vertebrates. Edinger's "Lectures on the Central Nervous System" will be followed, and numerous treatises and special papers used as a reference.

(f). **CELLULAR BIOLOGY.** Text-books, Hertwig's "The Cell and the Tissues;" and Wilson's "The Cell in Development and Inheritance."

A student whose major lies in Zoology may take two full years' work selected from subjects named in the foregoing paragraph.

Zoological Seminar. The class will meet weekly to discuss methods and present reviews of current literature. Each student will be expected to present at least one major and one minor review each term.

59. **ZOOLOGY AND ANATOMY.** Advanced laboratory. Five times a week. Similar to 57, but more extended.

61. **ENTOMOLOGY.** An advanced Practical Course. Five periods a week. The courses are designed for those who wish to make a thorough study of some particular group of insects or to follow some definite line of the science, either morphological or systematic, or to fit themselves for professional entomological work. The work will be arranged with each student.

The collections, monographs, and apparatus at the command of the Department afford excellent opportunities for advanced work in Entomology.

Students are required to take part in the Zoological Seminar of the preceding paragraph.

65. **ORNITHOLOGY.** Two laboratory periods a week. Advanced work on Morphology, Ecology and Classification of Birds.

SECOND SEMESTER

52. Continuation of Course 51. Lectures twice a week. One laboratory period.
54. Continuation of Course 53. Three laboratory periods a week.
56. Continuation of Course 55. Five laboratory periods a week.
58. Continuation of Course 57. Three laboratory periods a week.
60. Continuation of Course 59. Five laboratory periods a week.
62. Continuation of Course 61. Five laboratory periods a week.
66. Continuation of Course 65. Two periods a week.

ENROLLMENT

1899-1900

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE

GRADUATE STUDENTS—4

Derby, Florence, B. Ph.....Columbus
Gilmore, William Henry, B. Sc. (Agr.).....Millersport
Nichol, Gertrude, B. Ph.....Columbus
Sheldon, Helen Griswold, A. B. (Vassar College).....Shepard

UNDERGRADUATES — 153.

	Course	Course Hours	Credit Hours	Home Address
*Abbott, George Franklin	Agr.	210½	56	Medina
Abbott, Carl B	Agr.	206	112	Medina
Adcock, James G	Agr. S.	98	...	Webb Summit
Armstrong, Edgar Manley	Dairying	...	...	Zanesville
Armstrong, Clara	Dom. Sci.	203	150	Columbus
*Arnold, Frank Washington	Agr.	210½	43½	Somerset
*Atherton, William Thomas	Agr.	210½	71	Carrollton
Baldwin, Ethel Florence	Dom. Sci.	202½	47	Columbus
Bauman, Christian William	Dairying.	...	...	Axtel
*Beale, Harry Glenn	Agr.	206	99	Mt. Sterling
*Beatty, Madge	Dom. Sci.	202½	41½	Columbus
Beneker, Robert Edgar	Agr.	210½	54½	Cincinnati
Boggs, Howard Shannon	Agr. S.	98	60½	Kingston
Bratton, Alice May	Dom. Sci.	203	144	Columbus
Breckenridge, William Kemper	Agr. S.	98	98+5	Watertown
Breese, Clarence Nye	Agr. S.	98	97+6	Lima
Bugby, Morris O	Agr.	210½	51½	Kingsville
*Bundy, Lyman Edmund	Special	...	47	Colerain
Byers, William Gerald	Agr. S.	98	48	Lilly Chapel
Cahill, Verrill W	Agr. S.	98	44	Tiro
Candy, Ella Belle	Special	...	24	Columbus
Carey, Nathan Harold	Dairying	...	...	Gurneyville
*Church, James Scott	Agr.	206	55½	Palmyra
Clark, Herman Alfred	H. & F.	206	96	Medina
Clark, Ollie Dwight	Agr. S.	98	48	Wheaton
Clawson, Lucy Blanche	Dom.Sci.S.	90	90+11½	Okeana
Coberly, Edward D	Agr. S.	98	50+2	Georgesville
Conradi, Albert Frederick	Agr.	206	98	New Bremen
*Cotton, Edwin Charles	H. & F.	206	115½	Elyria
Cotton, George Washington	Dairying	...	...	Elyria
Crabb, James Byel	Agr. S.	98	98+11	Mt. Sterling
Crawford, Mary B	Dom. Sci.	203	195+10	Blaine
Creamer, Jesse Carlton	Agr. S.	98	54	Jeffersonville
Dallas, John Thomas, B. Sc	(Agr.)	...	...	Pine Valley
Davis, Carrie Samantha	Special	...	...	Rio Grande
*Davis, Ella Augusta	Dom. Sci.	202½	52½	Constantia

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Davis, Vernon Hayes, B. Sc.	(Agr.)	...	...	Byesville
Day, Albert Edward	Agr. S.	98	89+29	Mt. Carmel
*Demorest, Herbert Russell	Agr.	206	91	Columbus
Dixon, Eva Nicholson	Dom. Sci.	203	122	Columbus
Dock, Norton	Agr. S.	98	59+2	Cincinnati
*Dresbach, Mary	Dom. Sci.	203	132	Columbus
Dunlap, Frederick	Special	...	19	Chillicothe
Dunn, Hattie Franklin	Special	...	29	Columbus
Everett, William Russell	Dairying	...	...	Gnadenhutten
Ewart, John Weston	Dairying	...	...	Mogadore
*Ferguson, Ollie	Agr.	210½	33½	Steubenville
*Finlay, Annetta Jane	Dom. Sci.	203	104	Keene
Fippin, Elmer Otterbein, B. Sc.	(Agr.)	...	...	Galloway
Fisher, Milo Eddison	Agr. S.	98	44	Chili
Flory, Charles Henry	H. & F.	206	73	Arcanum
*Foster, Emma Warwick	Dom.Sci.S.	90	68½	Higbys
Foster, John Cook, Jr.	Agr. S.	98	61+1½	Higbys
Foster, Michael Leander	Dairying	...	...	Axtel
Frank, John Nicholas	Agr. S.	98	32+4	North Amherst
*Galehouse, David William	Agr.	206	142	Doylestown
*Gibson, Herbert R.	Agr. S.	98	34+48	Camp Chase
*Gladding, Maynard Marcus	Agr.	206	93	Windsor
Graber, Christian	Dairying	...	...	Burton
*Hamilton, Frank Edward	Agr.	206	93	Brownsville
Hanna, Charles Mitchell	Agr. S.	98	47	Tiro
*Hard, Jesse M.	Agr.	210½	21	Olentangy
Harper, Merritt	Agr.	206	150	Grove City
Hatfield, Clifford Christian	Agr. S.	98	52	Lebanon
Hayden, Cassius Clay, B. Sc.	(Agr.)	...	...	Oakdale
Heller, John	Dairying	...	...	Ona, W. Va.
Henderson, Harry Harold	Agr. S.	98	16	West Cairo
*Hess, Flora Louise	Dom. Sci.	203	65	North Columbus
*Hill, Mamie Faye	Dom. Sci.	203	116	Columbus
*Holloway, Carrie	Dom. Sci.	203	50	Columbus
Holt, David C.	Dairying	...	...	Galloway
Hoover, Clarence Boal	Agr.	210½	46½	Venice
*Hoover, Edna Brown	Dom. Sci.	202½	24	Columbus
Hunt, Jay Horatio	Dairying	...	...	Columbus
Hyatt, James Vernon	Agr. S.	98	44	Augusta
Immell, Woodford Elias	Agr. S.	98	29+3	Chillicothe
Innis, Byron Schofield	Agr. S.	98	51	Wagram
*Irwin, Arthur Milton	Agr.	210½	37½	Parkman
*James, Harold Francis	H. & F.	210½	32½	Pekin, China
Jennings, Otto Emery	Agr.	206	93	Olena
Jones, Lloyd	Agr. S.	98	98+7½	Columbus
Karrer, Carl	Agr. S.	98	5	Dublin
Kaylor, Rollie Washington	Dairying	...	...	Bellefontaine
*Kelley, William Lester	Agr.	206	85	Newark
Kinney, Charles C.	Dairying	...	...	Yellow Springs
Klein, Edith May	Special	...	11	Columbus
Kynett, Albert Gardner	Dairying	...	...	Collier, W. Va.

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Ladrach, John J.	Dairying	...	...	Birmingham
Langdon, Elmer	Agr. S.	98	63+3	Sabina
Lanman, Faith Robinson.	Dom. Sci.	202½	52½	Columbus
Lindley, Lulu	Dom. Sci.	202½	38	Fredericktown
*Linsley, Frank Preston.	Agr.	210½	15½	Gallipolis
*Long, Frank C.	Agr.	206	73	West Sonora
Mallow, Harry Campbell.	Agr. S.	98	40	Washington C. H.
Marshall, Ida	Dom. Sci.	203	89	Hemlock
Mason, Arthur Devillo.	Agr.	206	119	Wellington
Mears, William Holt.	Agr. S.	98	48+3	Moscow
Meek, Eunice	Dom.Sci.S.	90	45	Afton
Meiche, Louis	Agr. S.	98	98+7	North Royalton
Mesloh, Harry Smith.	Agr. S.	98	55	New Bremen
Miller, Merritt Finley, B. Sc.	(Agr.)	...	...	Ridpath
Miller, Maynard Everett, B. Sc.	Dairying	...	...	Dodgeville
Miner, Charles Austin.	Agr. S.	98	98+16	Bristolville
Mooney, Charles Napoleon, B. Sc.	(Agr.)	...	...	Milan
Murray, Edna Earl.	Dom. Sci.	203	132	Columbus
*McAlister, Lee Paden.	Agr.	210½	31	Thornville
McCall, Arthur Gillet, B. Sc.	(Agr.)	...	...	McGraw
McClelland, Chester Arthur.	Agr.	210½	48	Terrace Park
McKinley, Ira Esdras.	Agr. S.	98	20	Vaughnsville
McMahon, Mary Gertrude.	Dom.Sci.S.	90	80½	Columbus
*McOwen, James Jr.	H. & F.	206	157	Ovid
*Neill, Nelson Prentice.	Agr.	206	150	Venice
Nelson, Fred Burgess.	Agr. S.	98	79	Coe Ridge
Nelson, Fred Walker.	Agr. S.	98	52	Salem Center
Nelson, Homer Thrall.	Agr. S.	98	...	Selma
Oliver, Charley Ray.	Dairying	...	...	Portersville, Pa.
Orton, Louise Taft.	Special	...	4	Columbus
Osborn, Alice	Dom.Sci.S.	90	90+43	Cadiz
*Osborn, Harry Lester.	Agr.	210½	48	Chardon
Oswald, Rudolph	Dairying	...	...	Aurora
Perry, Elma Brooks.	Dom. Sci.	203	176	Troy
Perry, John Cole.	Agr.	206	165	Columbia Station
Peters, Frances Bush.	Dom.Sci.S.	94½	44½	Columbus
Poindexter, Charles Cardoga.	Agr.	210½	51½	Park'sb'g, W.Va.
Postle, Stuart A.	Dairying	...	...	Camp Chase
Richards, Don Arthur.	Dairying	...	...	Medina
*Riley, Valeria	Dom. Sci.	203	131	Washington C. H.
*Ruhlen, La Mott.	Agr.	206	104½	Plain City
*Schaeffer, Freelan Wilbert.	Agr.	206	188	Spanker
*Scott, Edith Clare.	Dom. Sci.	202½	26	Mt. Pleasant
Senter, Pearl	Special	...	45	Shepard
Shaffer, Jesse	Dairying	...	...	Black Lick
Shaw, Edward Lee.	Agr.	206	108	Newark
Shepard, Allen Day.	Dairying	...	...	Conneaut
*Sigrist, John Larkum.	Agr.	206	107½	Congress
*Skiles, Blanche Gertrude.	Dom. Sci.	203	115	Shelby
*Smith, Wilford B.	Agr.	210½	36	Chesterhill
Snyder, Addison Hogan	Agr.	206	158	Tacoma

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Stahl, Price Ewing	Agr. S.	98	47+2½	Jewett
Steward, Charles Benjamin, B. Sc.	(Agr.)	...	...	Marcy
Stiers, Thomas Vernon	Agr. S.	98	26	Zaleski
Sumner, Mrs. R. M.	Special	...	12	Columbus
Taylor, Frederick Wellington, B. Sc.	(Agr.)	...	...	Wooster
Thomas, Elmer Ellsworth	Dairying	...	...	Newark
Thompson, Jesse Eugene	Agr. S.	98	53	Bristolville
Trowbridge, Warner Wesley	Agr. S.	98	98+6	Painesville
Tyler, Fred J., B. Sc.	(H. & F.)	...	...	Perry
*Walker, William	Agr.	210½	36	West Canaan
Wampler, Milton Eugene	Agr. S.	98	55+3	Dayton
Weisman, Laura Anna, B. Sc.	(Dom.Sci.)	...	...	Columbus
Wheeler, Leroy Thomas	Agr. S.	98	58+6	Chillicothe
Williamson, Frances Glade	Dom.Sci.S.	94½	36	Columbus
Wolfe, La Verne Florence	Dom.Sci.S.	94½	45	Lucas

* Preparatory work incomplete.

COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE

GRADUATE STUDENTS—25

Allen, Lucy, B. A., 1897.....Columbus
Barrows, Sarah Tracy, M. L.....Columbus
Blakiston, Mary, B. Ph., 1893.....Columbus
Bohn, William Edward, B. A. (German Wallace College).....Olmsted Falls
Brown, Harold Warner, B. Sc. (Cornell University).....Oberlin
Collett, Samuel William, M. Sc. (Moore's Hill College).....Columbus
Converse, Edward Jasper, B. A., 1886, B. D. (Yale University).....Columbus
Doney, Carl Gregg, B. Sc., 1891, LL. B., M. A.....Delaware
Good, Paul Revere, B. A., 1899.....Westerville
Gore, Herbert Charles, B. Sc. (University of Michigan).....Chicago, Ill.
Hannum, William H., B. A., 1887.....Columbus
Hirst, Anna Brewster, B. A. (Antioch College).....Yellow Springs
Huddleson, Don Carlos, G. Ph., 1897.....Columbus
Jeffrey, Maude Dorothy, B. Ph., 1895.....Columbus
Kirby, Harriet Rebecca, B. A., 1898.....Columbus
Maag, Benjamin (Wooster University).....Mt. Eaton
Machwart, Washington J., B. S. (Muskingum College).....Mt. Eaton
Mann, Wilbur Edwin, B. Ph., 1899.....Columbus
Milligan, Mrs. Clara F., B. A., 1886.....Columbus
Parker, John Bernard, B. A., 1898.....Danville
Raymond, Maude, B. Ph., 1899.....Columbus
Robinson, Zella Vina, B. Ph., 1898.....Columbus
Rogers, Ellen Chapin, Ph. B. (University of Michigan).....Grand Rapids
Williams, Herber Oswald, B. A., 1894.....Columbus
Young, John Wesley, B. Ph., 1899.....Columbus

UNDERGRADUATES—419

	Course	Course Hours	Credit Hours	Home Address
Abbott, Roy A., B. Ph.		...	...	Columbus
*Adams, Elizabeth Jane.	Arts	126	68	Columbus
*Adams, Margaret E.	Arts	126	58	Columbus
*Adamson, James Manley.	L. & J.	99	15	Dayton
*Aldrich, Wesley Richard.	L. & J.	99	17	Columbus
*Althauser, Louis Girod.	Arts	127	...	Kenton
*Alward, Benjamin Clyde.	E. Ph.	129	12	Pataskala
Andress, Edna Alice, B. Ph.		...	...	Birmingham
*Andrews, John Davis.	Arts	127	9	Hamilton
Armstrong, Dan Hinkle.	Special	...	33	Jackson
Ash, Ray Charles.	Prep. Med.	100	54	Ashland
Baldwin, Mabel Dennison.	Special	...	13½	Columbus
*Ball, Danforth Ewers	Science	135	111	Columbus
*Ball Ernestine Faye.	Arts	127	32	Columbus
*Ballard, Marion Imrie.	L. & J.	99	...	Canton
Barcus, Eliza, B. A.		...	...	Columbus
*Barnet, Clarence Elwood.	Special	...	80	New Paris
*Bartram Faith Alberta.	L. & J.	99	22	Columbus
Bauman Samuel	Special	...	31	Birmingham
Beck, Edwin Long.	L. Ph.	126	92	Lithopolis
*Beebe, Carl Vorhees.	L. & J.	99	3	Mt. Gilead
*Beer, James Anderson.	Prep. Med.	100	61+20	Ashland
Beery, Harry Reber.	Arts	127	24	Canal Winchester
Bell, Florence Louise, B. Ph.		...	...	Columbus
Bell, Mary Edith.	Special	...	11	Columbus
*Bellows, Gertrude Halm.	E. Ph.	128	65	Columbus
*Bigelow, Bernard Barton.	L. Ph.	127	30	Findlay
*Bigelow, Hosea Bradley.	Arts	127	24	Columbus
Bittner, William Pitt.	L. & J.	98	68+2	Sandusky
Bohn, Frank, B. Ph.		...	...	Olmsted Falls
Bonnet, Alvin Cook.	Arts	127	33	Columbus
Booth, Carl Howard.	L. Ph.	127	25	Columbus
*Booth, Cora Vrooman.	L. Ph.	126	52	Columbus
*Booth, George Hamilton.	L. Ph.	127	4	Columbus
Bostwick Homer Z., B. A.		...	...	Columbus
Bostwick, Valeria	Arts	126	64	Columbus
*Bower Alice Ethel.	E. Ph.	129	...	Worthington
*Bowles, John Porter.	L. & J.	98	65	Columbus
Bradford, Frances Elizabeth.	E. Ph.	129	29	Columbus
*Braun, Bertha Elizabeth.	M. L. Ph.	127	...	Columbus
*Bridge, Effie Irene.	Arts	127	33	Columbus
Brooks, Stanley Grange.	Science	133	70	Columbus
Brown, Alexander Lackey.	Special	...	...	Catlettsburg, Ky.
Brown, Jessie L. P.	Arts	126	60	Columbus
Brown, Winfred	Special	...	...	Moscow
*Bryant, William Cheney.	L. Ph.	126	65	King's Creek
*Buck, Ralph William.	Science	132	29	Cardington
*Bulen, Elwood Joseph.	Com. & Ad.	131	5½	Columbus
Burgess, James Henry, B. Ph.		...	...	Big Horn, Wy.

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Burgess, Norman Almon	Prep. Med.	100	16½	Parkman
*Burkey, Charles Paul	Special	...	41+11	Pleasantville
*Burr, Mary	E. Ph.	129	29	Worthington
Butler, Blanche Woodruff	Arts	126	102	Wellsville
*Cannon, Anna Cathrine	L. & J.	98	86+11	Columbus
Carpenter, Jessie Marie	E. Ph.	128	66	Columbus
Carson Nellie Eliza	L. Ph.	126	86	Harrisburg
Chamberlain Robert M	Science	133	92	Columbus
*Chaney, James William	E. Ph.	128	77	Columbus
*Clagett, Arthur E	Science	135	66	Dayton
*Clapp, Katharine B	Special	...	64	Norwalk
*Clevenger, Charles Henry	Science	131	55+19	Fletcher
*Clevenger, Joseph Franklin	Science	131	57	Fletcher
*Coad, James Earl	L. Ph.	127	12	St. Lewisville
*Coates, Elmer William	Arts	127	25	Pomeroy
Cockerill, Orville Porter	Special	...	75	Washington C. H.
*Coe, Bertha L	Special	...	12	North Columbus
Cole, Fred	M. L. Ph.	127	18½	Zanesville
Colgan, Lillian Katharine	Special	...	71	Columbus
Collins, Walter Scott	Arts	126	95	Columbus
*Compton, Edward Cass	L. & J.	99	27+12	Coshocton
*Connolley Augusta	L. Ph.	126	72	Columbus
Connor, Alice Marie, B. Ph		...	...	Columbus
Connor, Ellen Josephine, B. Ph		...	...	Columbus
*Connors, John Leo	L. & J.	99	14	Columbus
Cooke, Levi	Arts	127	20	Columbus
*Corkery, Thomas Jefferson	Arts	127	25	Toledo
Corner, Edith	L. Ph.	127	87	Columbus
Cottom Frank W	Prep. Med.	100	59+6	Dayton
Courtright Elizabeth Pauline	Arts	128	107	Columbus
Courtright J Loring, B. A		...	...	Circleville
Courtright Stella Van	L. Ph.	126	96	Columbus
Coy, William Stacey	Arts	127	30	Columbus
Craig, Francis Miron	Special	...	25	Clarion
*Cunningham Charles Gilman	E. Ph.	128	103	Fostoria
*Davidson, Harold Glenn	L. & J.	99	20	Dayton
*Davidson Ruth Emily	E. Ph.	129	23½	Chicago, Ill.
*Davis William Edgar	Arts	128	64	Columbus
Dean, Wilbur Spencer	Special	...	97	Warsaw
*Dean, Ethel Sourbray	L. & J.	99	41	Columbus
*DeNune, Ethel	Arts	126	58	Columbus
Derby, Alice G	L. Ph.	126	101	Columbus
Dickinson, George Codwice	Arts	126	89	Columbus
*Diehl, William Ross	E. Ph.	129	...	Columbus
Dill, Augusta Dille, B. Ph		...	...	Columbus
Dollison, Harvey Clinton, B. Sc		...	...	Zanesville
*Dolson, Benjamin Reimmund	L. & J.	99	25	Lancaster
Donovan, Dennis Aloysius	E. Ph.	128	78	Columbus
Dow, Mary Edna	Special	...	...	Bellefontaine
Dowd, Charles Fuller, B. Ph		...	...	Toledo
Dubois, Wilbur L., B. Sc		...	...	Cincinnati

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Dufour, Alice	Special	...	93	Columbus
Durbin, Samuel Clyde	E. Ph.	128	100	McConnelsville
Dyer, Clarkson Werter	Arts	127	25	Plano
Eagleson, John Hervey, B. A.		...	...	Columbus
Eagleson, Joseph Pentecost, B. A.		...	...	Columbus
*Eastman, Katharine	L. Ph.	127	27	Columbus
Easton, Ernest Doane	B. Sc.	129	77	Springboro
*Ebright, Bessie	E. Ph.	129	17	Columbus
Edwards, Norma	Special	...	27	Columbus
Eisenbise, Bertha, B. Ph.		...	...	Columbus
Enderlin, Louis Charles	Special	...	...	Allegheny, Pa.
Ewalt, Clara Converse	E. Ph.	130	100	Columbus
*Farrar, Morton	L. Ph.	127	...	London
*Ferenbaugh, Burchard Blaine	Arts	127	33	Buckeye City
*Fink, Henry Emil	L. & J.	99	30	New Bremen
Fisher, Ida May, B. Ph.		...	...	Columbus
Follett, Mary Pelton	L. Ph.	127	33	Columbus
Foster, Asa Emmanuel	Arts	126	58	New Salem
Fox, Ross Garfield, B. Ph.		...	...	Columbus
Frederick, Albert Augustus	Special	...	...	Millersburg
French, Louis Vincent	E. Ph.	129	22	Jefferson
*Fullerton, Rutherford	L. & J.	99	33+3	Columbus
*Game, Francis Harvey	E. Ph.	128	60	Canal Winchester
Gamper, Hattie, B. Ph.		...	...	Columbus
Gardner, Blanche	Arts	127	...	Columbus
Garman, Susan Editha	E. Ph.	131	41	Dayton
Gauch, James Arlando	Arts	126	64	West Manchester
Gayman, Charles Welton, B. Ph.		...	...	Canal Winchester
Ginder, Floyd Edwin	Prep. Med.	100	25	Lancaster
*Godman, Leroy Hayes	L. & J.	98	57	Columbus
*Gordon, Earl Augustus	Prep. Med.	100	34	Junction City
*Gordon, Sarah Bryarly	Special	...	86	St. Mary's
*Gorham, Ira Garfield	Arts	126	44	Perrysville
*Graham, Reuben Jacob	E. Ph.	128	77	Northup
Greener, Gussie Howe	L. Ph.	126	102	Columbus
Griggs, Robert Fiske	Science	130	41	Columbus
Guittard, Claude B.	M. L. Ph.	126	41	New Bedford
Haecker, Christofer Frederick	Special	...	31	Sandusky
Hagenbach, George Edwin	L. Ph.	127	25	Urbana
Hahn, George Philip	Com. & Ad.	131	33	Napoleon
Hambleton, Ethel Ada	L. Ph.	126	91	Columbus
*Hambleton, Charles Reverdy	E. Ph.	129	2½	Hooksburg
*Hammond, Harvey George	L. & J.	99	...	Millwood
*Harbine, Sarah Smith	E. Ph.	129	41	Xenia
*Hard, Ansel Shallcross	L. & J.	99	22½	Bowling Green
Hardy, Caroline Church	Special	...	48	Columbus
Harward, Arthur Byron, B. A.		...	...	Columbus
Hatcher, Wesley	Special	...	...	Raymond
*Hauk, Will Comrie	Arts	126	101	South Charleston
Heitman, William L.	Science	132	29	New Bremen
Henderson, Herbert B.	Special	...	91	Laceyville

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Hensel, Donald Dean	Com. & Ad.	131	69	Eaton
Herrick, Sara Ethel	E. Ph.	128	83	Wellington
*Herrman, Bessie	E. Ph.	128	69	Worthington
Hertlein, Alice Kelley	Special	...	6½	Sandusky
*Hicks, Blanche	L. Ph.	129	27	Centerburg
Hicks, Nellie	Arts	128	99	Centerburg
*Hickey, Thomas Owen	Prep. Med.	100		Caylick
Hirsch, Rudolph	Science	133	91	Columbus
Hite, Bertha	Special	...	14	Columbus
Hoffmann, Hattie DeLong, B. Ph.		...	...	Columbus
*Holcomb, Harry John	Arts	128	90	Columbus
*Hommon, Harry Britton	E. Ph.	129	17	Marble Cliff
Honline, Mose A	Special	...	50	Columbus
Hopkins, Bertha Marie	L. Ph.	126	64	Columbus
Hopkins, Clara M	L. Ph.	126	61	Columbus
Hopkins, Edith Estelle	L. Ph.	126	65	Columbus
Houghton, Henry Spencer	Special	...	99	Columbus
Howard, Anna Faye B. Ph		...	...	Columbus
*Hubbard, Desha Darling	L. Ph.	127	19	Columbus
Huddleson, Mabel Lee	Special	...	9	Columbus
Hudson, Clara Putnam	E. Ph.	128	58	Middleport
Huling, Frank	Arts	127	26½	Columbus
Humphrey, Stella Hale	Special	...	40½	Peninsula
Hungelmann, Arthur	Science	129	74	Columbus
*Hunt, Mary Fulton	L. Ph.	126	90	Columbus
Hunter, Anna Eliza	M. L. Ph.	126	66	Columbus
*Hunter, Joseph Symmes	Arts	126	87	Seven Mile
Hurst, Louise Kate	Special	...	17	Piketon
*Huston, Frank Arilda	M. L. Ph.	126	87	Columbus
*Jacoby, Benjamin	Science	130	33	Marion
*Jacoby, Ethelwyn	Arts	127	22	Columbus
Jacoby, Mrs. S. C	Special	...	17	Columbus
Jaynes, Allan Brown, B. Ph		...	...	Columbus
Jeffrey, James Fred, B. Sc		...	...	Columbus
Jefferey, John Ralston	Special	...	80	Huron
*Jennings, Elma	M. L. Ph.	126	65	Eaton
*Jones, Daniel C	E. Ph.	128	60	Jackson
*Jones, Gilbert Haren	Arts	127	27½	Columbus
*Jones, John William	E. Ph.	128	87	Jackson
Jones, Richard Thomas, B. Ph		...	...	Columbus
Jones, Victor Waite	E. Ph.	128	88	Columbus
*Jordon, Homer Garfield	Arts	127	22½	Columbus
*Justice, Charles Lloyd	Arts	126	22	Leipsic
Karshner, George Melville, B. A		...	...	Columbus
Kauffman, Margaret Glenn	M. L. Ph.	126	78	Columbus
Kauffman, Henrietta Christine	M. L. Ph.	126	92	Columbus
Keiser, Forest Le Grand	Science	130	22	Bryan
Kennedy, Herbert Welles	E. Ph.	128	...	Coe Ridge
Kerr, May Lizzie	E. Ph.	129	25	Rushville, Ill.
*Kimball, Mabel Fawn	E. Ph.	129	19½	Woodstock
Kinder, Gordon Donald, B. Ph		...	...	Ottawa

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
King, Bernice	Arts	126	48	Columbus
Kirk, George Barlow	Arts	126	82	Columbus
Klein, David, B. Ph.		...	...	Columbus
Knight, Caroline Estell, B. Ph.		...	...	Columbus
Knight, Margaret Amanda	Special	...	28	Columbus
Kohl, Clayton Charles	L. Ph.	126	90	Perryburg
*Kohr, Paul Homer	Arts	127	26½	Columbus
Lambert, Elza Jay	Special	...	33	Plantsville
Latimer, Thomas Erwin	L. & J.	99	25+3	Hilliards
*Lawrence, Osa Alonzo	M. L. Ph.	127	37	Oxford
*Leeper, Charles	E. Ph.	129	3	
*Lentz, Florence	M. L. Ph.	126	80	Marysville
Leonard, Hannah Margaret	L. Ph.	127	19	Columbus
†*Lincoln, Elsie	E. Ph.	129	17½	Woodstock
Lisle, Charles Howard, B. Ph.		...	...	Pataskala
Lisle, Thomas G.	Com. & Ad.	131	22	Columbus
Long, Mila Myrtle	Special	...	2½	Columbus
Loren, Mary	Special	...	40	Columbus
*Loughrey, John Larison	L. & J.	99	15½	Marysville
Luse, Jessie Edna	E. Ph.	128	99	Columbus
Lyon, Maud Eliose	Special	...	29	Westfield, N. Y.
MacAdam, Lida Allison	Special	...	8	Worthington
Mack, Egbert Hiram	E. Ph.	129	30	Sandusky
Mark, Mary Louise	Arts	127	35	Columbus
Marriott, Robert Henry	Science	129	89	Richwood
*Martin, Franklin Ewing	L. Ph.	127	7	Columbus
Martin, William Kooken	L. Ph.	127	25	Lancaster
Martz, Velorus	Arts	126	103	Columbus
*Matthews, Max Moses	E. Ph.	129	49	Vinton
Mayfield, Victor Hugo	Special	...	3	Prospect
Meade, Caroline Annis	M. L. Ph.	126	78	Columbus
Merkle, Albert Edward	Prep. Med.	100	31	Chillicothe
*Merrick, Lawrence Hildreth	Arts	127	22½	Zanesville
*Miesse, Frank H.	L. Ph.	127	49	Chillicothe
Miller, Albert Morris	Special	...	22	Columbus
*Miller, Charles Reed	E. Ph.	128	57	Bellville
Miller, Fred A.	E. Ph.	128	104	Columbus
Miller, Gretchen Pauline, B. Ph.		...	...	Columbus
*Miller, Paul Scott	Science	130	24½	Marion
Mills, Donald P.	Special	...	36	Norwalk
Mitchell, Lynn Boal	Arts	127	41	Piqua
Mitzenberg, Allena May	L. Ph.	126	94	Columbus
Mitzenberg, Fannie Katheryn	L. Ph.	127	83	Columbus
Mock, Marcia Inez	L. Ph.	126	102	Columbus
Malloy, Mary Aloysia	L. Ph.	127	25	Sandusky
Maloney, William Patrick	Special	...	72	Prospect
Moon, Clarence Victor, B. Ph.		...	...	Farmer's Station
Moore, Clarence L. E.	Science	129	98	Washington C. H.
Moore, Edgar Howard, B. Sc.		...	...	Columbus
*Morgan, Roy	E. Ph.	128	70	Greenland
Morse, Max Withrow	Science	130	27	London

† Died March 18, 1900. * Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Morton, Max De Los	Special	...	33	Ashtabula
*Muirie, Frederick John	Arts	126	61	Youngstown
Mull, Ernest Clinton	L. & J.	99	30	Lebanon
Mumma, Marion W	Science	133	108	Dayton
McAllister, Earl Saddler	E. Ph.	128	86	Columbus
McAlpine Maude A.	Special	...	12	Columbus
McCallum, Raymond, B. Ph		...	...	Dayton
McDonald, Joseph Slyvester	E. Ph.	128	98	Rendville
McDowell, James Keen	L. Ph.	127	41	Columbus
*McGugin, Elizabeth Winifred	Arts	127	45	Ohio Furnace
*McKinley, Mary Ann	L. Ph.	127	19½	Trinway
McKinney, Frank C	Arts	126	108	Columbus
McPherson, Clarence Githeus	Science	130	...	Xenia
*McQuigg, Charles Wesley	L. & J.	99	15+8	Pomeroy
*Nachtrieb, Clarence R	L. Ph.	127	22½	Wauseon
Nash, Simeon	Arts	126	103	Columbus
*Needles, Ada Ruckle	Science	129	38	Groveport
Neiswender, Lisle W	Prep. Med.	100	68+2	Grove City
Nichols, Ada May	M. L. Ph.	126	68	Chillicothe
*Nida, William Lewis	E. Ph.	128	92	Lincoln
Norris, John S	M. L. Ph.	126	80	Columbus
*O'Brien, Charles Francis	L. & J.	99	33	Urbana
*Orndorf, Earl Luther	E. Ph.	129	35	Wauseon
*Ortman, Earl Hill	L. Ph.	127	25	New Salem
Orton, Samuel Torrey	Science	133	83	Columbus
Osborn, Abner Andrews, B. Sc		...	...	Columbus
Parmenter, William Watt, B. A		...	...	Mt. Vernon
Parsons, George McLellan	L. Ph.	126	98	Columbus
Patterson, Bertha Gildersheve	Arts	126	105	Columbus
*Pavlicek, Frank J	L. Ph.	126	85	Toledo
*Peoples, Emmet W	Arts	126	21	Pomeroy
Pitts, Grace Lenore, B. Ph		...	...	Columbus
*Plum, Harley Martin	Arts	126	67	Ashville
Plummer, Alice Greenwood	Special	...	17	Columbus
*Pocock, Lucy Hunt	E. Ph.	128	68	Columbus
Porter, George Henry	L. Ph.	126	98	New Philadelphia
*Postle, Carlton David	Prep. Med.	100	33+6	Alton
Postle, Carl Haldy	Com. & Ad.	131	17	Columbus
Potts, Beulah Josephine	Arts	127	29	Columbus
*Potts, Helen Georgiana	Special	...	32	Columbus
Powell, Blanche	Special	...	...	Mt. Cory
*Powell, Cornelia	Arts	127	60	Columbus
*Powell, Raymond Thompson	L. Ph.	127	6	Columbus
*Pratt, Edna Stuart	Arts	127	...	Columbus
Pulling, Margaret Glaze, B. Ph		...	...	Columbus
Pumphrey, Josiah Merton	Prep. Med.	100	64	Martinsburg
*Rathburn, James Irwin	Prep. Med.	100	16	Gallipolis
*Raymond Maybelle	E. Ph.	128	77	Columbus
*Raymond, Stockton	L. Ph.	127	22	Columbus
Redrow, Clara M	M. L. Ph.	126	50	Williamsburg
Redrow, Walter Leffingwell, B. Sc		...	...	Williamsburg

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Rees, Edith Celeste	Arts	126	104	Columbus
*Reese, David R.	Arts	126	94	Shawnee
Reinhard, Frank J., Jr.	E. Ph.	128	40	Columbus
Reütinger, Ernest Victor	Prep. Med.	100	62+8	Chillicothe
Rice, Mary Washington, B. A.		...	...	Columbus
Rickard, Alexander	Special	...	5	Columbus
Rickey, Tallmadge Archer, B. Ph.		...	...	Columbus
*Ridenour, Walter Ashton	L. & J.	98	52+13	Jackson
*Robinson, John Fletcher	Prep. Med.	100	26+5	Columbus
*Rockey, Noble Warren	E. Ph.	129	21	Dayton
*Rodebaugh, Mabel Mary	M. L. Ph.	127	22	Marysville
Roebuck, Carl Fletcher, B. Ph.		...	...	Dalton
Roekel, Frederick Augustus	Prep. Med.	100	27	Zanesville
Roney, Mary Malvina	L. Ph.	126	103	Columbus
Ruebesh, Joseph Keiffer	Special	...	31½	Dayton
*Rushton, Norman	Com. & Ad.	131	56	Selkirk, Ontario
*Sadler, Anna Belle	L. Ph.	126	74	Columbus
Salm, Edna Esther	L. Ph.	127	39	Columbus
Sayre, Charles Boyd, B. A.		...	...	Columbus
Schaff, Mae B., B. Ph.		...	...	Columbus
*Schantz, Albert J.	Science	135	66	Dayton
Schilling, Emelia Jahana	Special	...	10	Columbus
*Schneider, Earnest True	L. & J.	99	25½	Dayton
Schoedinger, Ferdinand P	Arts	126	74	Columbus
*Schönthal, Derso Clarence	E. Ph.	128	60	Columbus
Scott Dudley B. Ph		...	...	Columbus
*Seymour Edith Lillian	Arts	127	27	Columbus
Seymour, Raymond Jesse, B. Sc.		...	...	Columbus
*Schaeffer, Ray	Arts	127	19½	Coshocton
*Shaw, Harry R.	E. Ph.	128	85	Zanesville
*Sherman, Richard Jay	Arts	127	35	Toledo
Shigley, Anna B.	Special	...	29	Jamestown
Simpson, Warner Pike	Prep. Med.	100	34	Worthington
Singleton, Charles T., B. Ph.		...	...	Columbus
Smith, Albertine Charlleen, B. Ph.		...	...	Columbus
*Smith, Harold Osborn	L. Ph.	126	64	Columbus
Smith, Lida May	Special	...	1	Columbus
Smith, Ralph Harvey	Prep. Med.	100	19	Columbus
Smith, Stanley Robb	Special	...	18	Columbus
Smith, Virginia Roletta, B. Ph.		...	...	Columbus
*Snyder, Henry Williams	E. Ph.	129	24½	Ironton
Souder, Charles Granville	Science	130	5½	Logansport, Ind.
*Southwick Myrtle Minerva	E. Ph.	129	16	Kendallville, Ind.
*Southworth, Ruth	E. Ph.	129	27	Columbus
Sperry Wilmot, Jr.	E. Ph.	128	91	Mt. Vernon
Sproat, Martha Evans	L. Ph.	127	37	Columbus
*Staley, Homer F.	Arts	126	48	Columbus
Stephenson, Bertram Sheaver	L. Ph.	126	96	Jackson
*Stevenson, Ray David	Special	...	62	Fostoria
*Steward, James Clarence	E. Ph.	129	29	Marcy
*Stewart, George Francis	L. & J.	99	9½	Coshocton

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
*Stewart, Gilbert H., Jr.	L. & J.	98	47	Columbus
Stimson, George, B. A.		...	...	Columbus
*Stults, Newton Delano.	E. Ph.	129	...	Fremont
Sullivan, Oscar M.	Arts	126	72	Columbus
Swaney, Sara C.	L. & J.	98	61+1	East Liverpool
*Swift, Samuel Ferguson.	E. Ph.	128	47	Jackson
*Tarbill, John Wesley.	Arts	126	114	Atlanta
*Tatje, Oral D.	Prep. Med.	100	34	Columbus
Taylor, Bessie Battelle.	L. Ph.	126	70	Columbus
*Taylor, Mary Hill.	L. Ph.	127	33	Columbus
*Taylor, William Harry.	E. Ph.	128	74	Columbus
Teter, Sumner	Science	129	63	Columbus
*Teter, Millicent	M. L. Ph.	127	12	Columbus
Thomas, Lawrence David, B. Ph.		...	...	Lancaster
Thomas, Robert Park.	Special	...	...	Kennard
*Thompson, King Gibson.	Special	...	74	Georgetown
*Thompson, Roy Washington.	L. Ph.	127	27	Gallipolis
Tietjens, Otto	Com. & Ad.	131	...	Napoleon
Tilden, Samuel Jay.	Special	...	28½	Garrettsville
*Tilton, Josephus Howard.	E. Ph.	128	110	Jelloway
Timberman, Andrew	Special	...	...	Columbus
Tipton, Robert	Special	...	...	Milo
Trauger, Bertha Elizabeth.	Special	...	6	Columbus
Trauger, Clara Salome.	Special	...	7	Columbus
Travis, Fred L., B. A.		...	...	Pana, Ill.
Travis, John F., B. A.		...	...	Green Camp
Türcke, Therese	Special	...	12	Columbus
Turner, Bertha Louise.	M. L. Ph.	126	38	Columbus
Turner, Lucile E.	Special	...	...	Columbus
*Ulsamer, Fritz Martin.	M. L. Ph.	127	5½	Gallipolis
*Veach, Esther Louise.	E. Ph.	129	23½	Newark
Vinson, Albert E.	Special	...	116	Dayton
Wagner, Charles John.	Special	...	13	Belle Centre
Wallace, William Garvey.	Special	...	...	Bellefontaine
Walsh, Frances Lyon.	Arts	126	40	Columbus
Walters, Barton	Special	...	32	Circleville
Ward, Annette Persis.	Special	...	26	Columbus
*Ward, Lila Lucile.	L. Ph.	126	90	Reynoldsburg
*Warner, John Howell.	Arts	127	25	W. Shelby, N. Y.
Waugh, Helen Grace.	L. Ph.	129	16	Bowling Green
*Weaver, Mima Jacobs.	E. Ph.	131	41	Dayton
Weber, Sophia Frances.	Special	...	31	Columbus
Weick, Carrie Rosina.	Science	129	104	Columbus
Weld, Harry Porter, B. Ph.		...	...	Marysville
*Weller, Charles Ralph.	L. Ph.	127	...	Portsmouth
Welling, Faith Cornelia.	Arts	126	94	Worthington
*Wells, Byron Bliss.	Science	129	59	Ostrander
*Wells, Harry B.	Arts	126	40	Columbus
West, Earle Downs, B. A.		...	...	Columbus
Whetsel, James Anderson Garfield.	Arts	127	30	Columbus
*Whitaker, William Earl.	E. Ph.	128	99	Wauseon

* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
*White, Carroll Agnew	L. Ph.	126	45	Marysville
Whiteside, John Wesley	E. Ph.	128	93	Bloomingburg
Wilkinson, John Anderson	L. Ph.	127	33	Piqua
*Williams, Anna Florence	E. Ph.	129	26	Jackson
Williams, Clara Maude, B. Ph		...	...	Columbus
Wilson, Charles Robert	L. & J.	99	26	Circleville
*Wilson, Willard Aleck	Com. & Ad.	131	25	Columbus
Wing, Lucius Arthur	Science	130	35	Columbus
*Woods, William Burroughs	L. & J.	99	36+3	Garrettsville
Wright, Nellie	E. Ph.	128	80	Worthington
Yoder, Harvey Elmer	Special	...	11	North Industry
*Young, Claude Burnett	L. Ph.	127	27	West Rushville
*Young, Mary Grace, B. Ph				Mt. Vernon

* Preparatory work incomplete.

COLLEGE OF ENGINEERING

GRADUATE STUDENTS — 11

	Course	Home Address
Edwards, Clarence J B. S. Pacific College.	Cer. S	Newberg, Ore.
Ford, Nile Otis A. B. Washington and Jefferson.	E. M	Wheeling, W.Va.
Grate, Charles A M. E. Ohio State University.	M. E	Yale.
Groves, John Wesley C. E. Ohio State University.	E. M	Batavia.
Hale, Frederick James M. E. Ohio State University.	M. E	Mogadore.
Ludlow, Stephen H B. S. Albion College.	*Cer	Union City, Ind.
McIntire, Alfred Heber E. E. Ohio State University.	M. E	Mt. Vernon
Schlochtermeyer, Carl Fred A. B. St. Xavier College.	E. E	Cincinnati
Somermeir, Edward Everett G. Ph. Ohio State University.	E. M	Westwood
Williams, Ira A B. S. Iowa State College.	*Cer	Ames, Iowa
Wynne, Francis Edmund B. A. and M. A. Bethany.	E. E	Bethany, W. Va.

* Pursuing a special course.

UNDERGRADUATES — 394

	Course	Course Hours	Credit Hours	Home Address
Albin, Carl	E. E.	219½	52	Columbus
Alford, Arthur Milton	M. E.	22	138+4	Windham
*Ames, Holiday	C. E.	209	34+3	Ashland
*Archer, Carl Hunter	E. E.	219½	...	Columbus
Armstrong, Hugh Cook	E. E.	219½	43½+3	Clintonville
Arndt, Mrs. Mary Korst	Special	...	2	Columbus
*Arnold, Charles H	M. E.	222	91	New London
Bahrke, Charles Frederick	I. A., S.	96	35	Columbus
Bailey, Ervin George	E. E.	218	92	Damascus
*Bailey, Edward Harding	†M. E.	...	66	Damascus
*Bailey, Purdy Sanford	C. E.	210½	29½+5	Warren
*Baker, Charles Carroll	E. E.	219½	...	St. Paris
*Balz, Ernest	C. E.	209	98	Columbus
*Balz, Louis Christian Fred	C. E.	209	98	Columbus
Barker, Russel David	M. E.	223½	43½	Brooklyn, N. Y.
Barlow, Moses Henry	C. E.	209	159	Columbus
*Barringer, John Martin	Chem.	202	136	Washingt'n, D.C.
Barringer, Lawrence Eugene	Cer.	211	170+5	Washingt'n, D.C.
*Barry, William John	C. E.	209	78	New Straitsville
*Battenfield, John Milton	E. E.	218	68½	Delaware
*Baughman, Norman	E. E.	219½	42	Roseville
Baumann, John Carl Bernhardt	†Min'g, S.	...	59+21	Gütersloh, Germ.
*Bauroth, Walter John	M. E.	222	83	Springfield
Beard, Frank Andrew	I. A.	222	38	Jacksontown
*Bedwell, Charles Francis	E. E.	218	46	Columbus
Benbow, James D	I. A., S.	96	47	Milo
Berndroth, Geary Martin	M. E.	223½	45	Geneva
*Berry, Charles Watson	E. E.	219½	19	Columbus
Besse, Thomas Samuel	E. E.	219½	...	Pataskala
*Bigelow, Clarence C	E. M.	208	103½	Findlay
Billingsley, Robert Wallace	M. E.	222	99	Lisbon
*Bleininger, Albert Victor	†Chem.	...	126+31	Columbus
Boehme, Adolph Joe	M. E.	222	157+3	Youngstown
Bomesberger, Walter Nelson	E. E.	219½	45½+5	Columbiana
Boothman, Dale Maxwell	M. E.	223½	55½	Bryan
*Bostwick, Oliver Newton	C. E.	209	93	Mt. Sterling
Bott, George Robert	M. E.	222	156	Columbus
Bowden, Harry William, C. E				Minerva
*Boynton, Henry Percy	E. M.	209½	14½+1	Elyria
Bradshaw, Eugene Bingham	Special	...	...	East Liverpool
*Bramble, Bennett Glenn	Chem.	209½	...	Bellefontaine
Brannan, Thomas Hayes	C. E.	210½	42+3	Marysville
*Brashear, Edward Rosemond	C. E.	210½	54½	Columbus
*Bridinger, Leon A	E. M.	209½	22½	Tiffin
*Britton, William Miller	E. E.	219½	28+13	Columbus
Britton, Lloyd C	C. E.	209	88	Williamsburg
Brooks, Herbert Barton	E. E.	218	111+6	Piqua
Buchenberg, Alvin Ernest, M. E. in E. E.		...	...	Holgate

† Pursuing a special course.
* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Burch, Orrin	E. E.	218	63½	Columbus
Buydden, Wade Jennings, Jr.	E. M.	209½	7	Dayton
*Cameron, James L.	Arch.	217½	47½+2	Malvern
Cameron, Harry Ezra	C. E.	209	159	Lisbon
Cameron, Gaylor Malcomb	E. E.	219½	41	Jeromeville
Campbell, Willis Elmer	Chem.	208	92	Fostoria
Campbell, Rolo Wilbur	C. E.	209	53	Fostoria
Cannan, William	†Cer.	...	75	Plymouth
*Carmichael, Robert	M. E.	223½	29	Columbus
*Carr, William Brewster	E. E.	219½	...	Yellow Springs
Cartzdafner, Roy Edwin	M. E.	223½	53	London
*Caskey, George Alexander	M. E.	222	96	Columbus
Cavanaugh, Andrew Francis	M. E.	...	...	Dayton
*Cavin, Frank Thomas	E. E.	218	116	Spencer
*Chaffin, Wendel Wilson	C. E.	209	57+12	Dayton
*Chamberlain, John Ross	C. E.	209	56	Tiffin
Chandler, Homer Payne	E. E.	218	95+13	Columbus
*Chandler, William H.	C. E.	210½	...	Bellefontaine
Chenoweth, Howard	†E. E.	...	56	Range
Childs, Harry Jesse	C. E.	210½	21½+6	Troy
Chubb, Joseph Horace	C. E.	210½	47	Columbus
Clarke, James Ulrick	E. E.	218	111	Lancaster
Colgan, Frank J.	Cer., S.	90	30+52	Columbus
Conrad, Vern Louis	C. E.	209	104+6	Columbus
*Cook, Spencer Nye	E. M.	208	50½	Chillicothe
*Cooke, Royal Alstan	E. E.	219	132+10	Wyoming
Cooley, James Riddile	E. E.	219½	50½	Nelsonville
Cooper, Ralph McClelland	I. A., S.	96	15	Struthers
*Copland, James Samuel, Jr.	†M. E.	...	7	Dresden
Cosley, Harvey Harter	C. E.	209	154	Troy
Crabill, Pearl P.	†M. E.	...	86	Springfield
Crable, Arthur	C. E.	209	180+5	Columbus
Crable, George	E. M.	208	107	Columbus
Creed, Frank Roy	Mining, S.	91	27	Struthers
Cridland, Harry Clifford	E. E.	219½	55½	Dayton
Crooks, Thomas Elliott	E. E.	219½	55½	Van Wert
Cryder, Howard Michael	Arch.	215	69	Chillicothe
Cryder, Ross Warner	E. E.	219½	35½	London
Damon, Owen H., C. E.		...	...	Hinckley
*Dann, Walter M.	E. E.	218	112	Columbus
Darrah, John Francy	E. E.	219	31½+2	Toronto
Davison, Holmes Bergen	Cer., S.	90	...	South River, N.J.
*Day, Stanley Frank	E. E.	219½	9½	Columbus
*Denmead, Edward Graham	M. E.	223½	32+3	Columbus
*Denny, Charles Wampler	E. E.	219	136	Middletown
DeWolf, Roger Dennison	E. E.	219	164+2	Madison, Ga.
Dick, Owen Quinton	I. A., S.	96	33+4	Marshall
Dickenson, Morris L.	†I A.	...	...	Columbus
*Diehl, Joseph A.	C. E.	209	81+8	Defiance
*Dierdorff, Percy Cyrus	M. E.	222	70	Columbus
Dill, Raymond	E. E.	219	162+3	Columbus

† Pursuing a special course.
* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
*Doty, Charles Wilgerson	E. M.	209½	11+5	Hanging Rock
Drummond, William George, M. E.		...	...	Cleveland
Dunlop, Robert Rowse, M. E. in E. E.		...	...	Columbus
*Dupuy, Benjamin Francis	C. E.	210½	52½+8	Ironton
*Ecker, Harrison Grant	E. E.	218	53½	Columbus
*Edgerly, Raymond John	C. E.	210½	39½+6	Pataskala
*Elliott, Emmett Foster	Arch.	215	103	Chester Hill
Elsner, Richard E	C. E.	209	61+4	Newark
Emswiler, John Edwin	E. E.	219½	54½	Morgan Center
Erdmann, William	I. A.	201	191+10	Chillicothe
Escobar, Raphael	†Min'g, S.	...	22	Puerto Principe,
*Espy, Frank	†E. E.	...	104	Kenton [Cuba
Euchenhofer, Albert John	E. E.	219½	39	Dayton
Evans, Charles Hopkins	Mining, S.	91	45	Evanston
*Evans, William Ruthrauff	M. E.	223½	...	Salem, Va.
*Eysenbach, Louis, Jr	Ceramics	214½	51½	Delphos
*Faulkner, Eldridge Rhodes	E. M.	209½	9½	Tippecanoe City
Faulkner, Samuel Starrett	E. E.	219½	...	Troy
*Fay, Sherman	M. E.	223½	55½	Wyoming
Fickes, Walter M., E. M in Ceramics		...	...	Steubenville
Fleming, Joseph Hamilton	C. E.	209	99+24	Olentangy
Follett, George Alfred	C. E.	209	83+17	Columbus
Foster, George C	E. M.	208	107+2	Schooley
Foster, Vause	E. M.	209½	51½	Higby
*Fox, Lewis	C. E.	210½	26½+6	Payne
Frame, Rollo St. Clair	C. E.	209	159	Washington
Frankenberg, George T	M. E.	222	109	Columbus
Frechtling, Arthur George	M. E.	222	166+4	Hamilton
Freer, Will Davis	Cer.	211	49+4	Cortland
*Friedland, Francis William	M. E.	222	64½	Coalton
Frost, George Winfield, M. E.		...	...	Columbus
Fulton, James Stewart	M. E.	223½	55½	Steubenville
*Funk, Leo William	M. E.	223½	41½+5	Chester Hill
Gates, Ellis Day	Cer., S.	90	45+25	Hinsdale, Ill.
Geren, Arthur G	Mining, S.	91	33+10	Columbus
Gilchrist, Edward Luce	E. E.	218	76	Ashtabula
*Gleichauf, Frank S	Arch.	215	103	Newark
*Goodell, Frank Herbert	Chem.	211	93	Columbus
*Gould, William Stewart	M. E.	223½	50½	Wyoming
*Gray, Thomas M	M. E.	223½	30	Pittsburg, Pa.
Green, Homer Stewart	E. E.	218	122	Raymond
Grindel, Charles Stanton	E. E.	219½	39½	Jacksontown
Hager, LeRoy William	C. E.	209	132	Piqua
*Hall, Robert Gilbert	E. M.	209½	21	Dayton
Halsema, Eusebius J	C. E.	210½	52+4	New Bremen
Halverstadt, Herbert	Cer.	214½	34½	Columbiana
Hamilton, Ross Elroy	C. E.	210½	52	Keene
Hammond, John Miller	C. E.	209	104+2	Columbus
Hance, Harry Thomas	Chem.	202	156	Columbus
Hapgood, Eugene Palmer	Chem.	202	118	Sabina
Hardy, Paul	E. M.	208	87½+5	Columbus

† Pursuing a special course.
* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Harkins, Robert Rusk, M. E.		...	...	Columbus
Harmar, Frederick Sturgis	Mining, S.	91	20	Columbus
Harrop, Carl B	E. M.	208	107	Columbus
Harvey, Clarke Kenerly	C. E.	210½	53+3	Brownsville
*Hatton, Frederic George	Arch.	217½	11	Columbus
Hayman, Will Clayton, M. E. in E. E.		...	...	Holgate
Hayes, Charles Bradford	E. E.	219½	55½	Hilliards
Hedges, Benson Rice	M. E.	222	107	Columbus
Helvey, George Stanley	M. E.	223½	53	Hamilton
*Herrick, Hobert C	Chem.	209½	19	Wellington
*Hershey, Herbert Clover	I. A.	222	4	Columbus
Hill, Harry Earl	C. E.	210½	100	Richwood
Hill, Cortland Latimer	C. E.	209	47	Berlin Heights
Hirst, Harry	E. M.	208	93	Midvale
Hitch, James Frank	C. E.	209	104	Batavia
Holbrook, George Frederic	E. M.	208	97	Bucyrus
*Holloway, Thurman Welferd	E. E.	219½	42½	Zanesville
Horn, Charles Curtis	E. E.	219½	...	Pipesville
Hoster, Herman A	M. E.	222	43½+6	Columbus
*Howard, Oscar David	Arch.	212	100+40	Circleville
*Huddleson, Frank	†E. M.	...	129	Columbus
Hulbert, William Rowsell	M. E.	222	79½+3	New York, N.Y.
Hull, Walter Austin	Cer.	211	107+8	Orangeville
Hummel, Edmund Ray	E. E.	219½	2	Carroll
*Hunter, James Williamson	C. E.	210½	54½+5	Zanesville
Hunter, Madone Carrington, M. E. in E. E		...	...	Norwich
*Hylton, Gratwoods Walter	†M. E.	...	60	Springfield
Jackson, Charles Edwin	Cer. S.	90	45+3	Wheeling, W.Va.
Jackson, Elmer Collins	C. E.	210½	4½	Columbus
*James, Frank Richard	E. M.	208	82	Columbus
Johnson, Earl S., M. E. in E. E		...	...	Plants
Johnson, Walter A	M. E.	222	109	Columbus
*Johnston, Edward G	M. E.	223½	23+3	Bangor, Mich.
Jones, Howard Martin	E. E.	218	113	Marysville
*Jones, James Albert	C. E.	210½	38	New Straitsville
Judson, Walter Raymond	E. E.	219½	55½	Dayton
Kanmacher, Samuel Houston, M. E. in E. E		...	...	Columbus
*Keating, Harvey Thomas	Chem.	208	100	Columbus
Keim, Herbert Edward	C. E.	210½	37½+2	Cleveland
Keller, Daniel Casteel	E. E.	218	54	Washington C.H.
Keller, William	E. E.	219½	20½	Washington C.H.
Kennedy, William McCreery	Cer. S.	90	10	New Brighton,
Kern, William Frederick	Chem.	208	107	Bellaire [Pa.
Kettering, Charles Franklin	E. E.	218	54	Loudonville
Kettler, Frank Christian	E. E.	209	155	New Bremen
*Kidder, Leonard	C. E.	210½	...	Woodstock
*Killinger, Claud H	C. E.	210½	7	Toledo
*Kimmel, Fred Bernham	E. E.	219½	46½+3	Van Wert
King, Francis Emmet	Mining, S.	91	89+10	Leisenring, Pa.

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* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
King, Herbert Sumner	C. E.	209	181+9	Medina
*Kinnear, Harry Baldwin	Chem.	208	88	Mt. Sterling
*Kinnison, Ernest Eugene	C. E.	209	99	Jackson
Kirker, Gaylord B	Mining, S.	91	88+19	Catlettsburg, Ky.
Kittle, James Monroe	M. E.	223½	66½	Columbus
Klie, Walter	M. E.	223½	48	Columbus
Knieling, Charles August	E. E.	218	103+2	Willoughby
*Knies, Daniel	E. E.	218	71½	Columbus
Knight, William Abner, M. E.		...	...	Columbus
*Knoderer, Homer Guy	E. E.	218	112	Columbus
Knox, Frank S., E. M.		...	...	Columbus
Krumm, Thomas Zettler	C. E.	209	83	Columbus
Kunkle, Fred Raymond	E. E.	218	79+14	Bryan
*Laiblin, Garfield	M. E.	222	80	Canton
Lamb, Whitney Earl, M. E. in E. E.		...	...	Commercial Point
*Lampert, John Martin	M. E.	222	96	Xenia
*Lanning, Adrian Roy	C. E.	209	17	Dennison
Lee, Corlis Edgar, M. E. in E. E.		...	...	Pugh Postoffice
*Leinbaugh, George Gurden	M. E.	220	160+3	Bellevue
*Lesh, John Howard	M. E.	220	146	Louisville
*Lied, Ernst Mitchell	E. E.	218	72	Columbus
Linville, Clarence Philander, B. Sc. in Chemistry		...	...	Urbana
Linxweiler, Otto	M. E.	223½	43½	Dayton
Lloyd, Donald K.	Mining, S.	91	5	Columbus
Lockwood, Howard Thomas	C. E.	209	92	Batavia
Loewensohn, David	C. E.	210½	42½	Urbana
Long, George Garfield	E. M.	209½	54½	Tippecanoe City
*Luse, Herbert James	M. E.	223½	12	Columbus
Lyon, Arthur Hollingshead, M. E.		...	...	Wauseon
*Marckworth, Otto Stanley	†Chem.	...	168	Cincinnati
Marietta, Harry Riefsnider	E. E.	218	100+3	Dayton
Marriott, John Minges	Arch.	215	82½	Delaware
*Marshall, Charles Howard	M. E.	223½	41	Fair Haven
Marshall, Willard Beverly, M. E. in E. E		...	...	Piqua
Martin, John D., Jr.	M. E.	222	174+19	New Straitsville
Marting, Samuel Arthur	†Chem.	...	7	Portsmouth
Mason, John T.	†Chem.	...	25	Columbus
Maxwell, Howard McGee	E. E.	219½	10½	Columbus
*Melick, Cyrus Alan	C. E.	210½	54½	Columbus
Melick, Neil Albert, C. E.		...	...	Columbus
Mercer, Robert Wood	E. M.	209½	51½	Chester Hill
*Miller, Albert Sanford	E. M.	209½	20½	Tiffin
Miller, Charles Emmitt	Arch.	212	150+5	Spencer
*Miller, Ralph Charles	C. E.	209	138+11	Zanesville
*Minor, Wells Hammond	E. M.	209½	54½	Akron
Moist, Harvey Clinton	E. E.	219½	...	Kinsey
Monserrat, Charles R.	M. E.	223½	31	Columbus
Mooney, George Lewis	E. E.	219½	55½	Woodsfield
*Mooney, William Joseph	C. E.	210½	11½+3	Cleveland

† Pursuing a special course.
* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
*Morlan, Wilbert	†M. E.	...	91+7	Rogers
Morris, Robert Hamilton	E. M.	209½	135+20	Columbus
Morris, Samuel	E. E.	219½	12½	Bloomingburg
Morris, Willard Bernard	M. E.	222	91	Columbus
*Morris, William Blaine	M. E.	222	109	Massillon
Morrison, Franklin Houston	Cer. S.	90	45+10	Denver, Col.
*Murphy, Joseph Lincoln	C. E.	210½	49½	McArthur
Myers, Albert B., E. M.		...	...	Columbus
Myers, Fred	C. E.	210½	44½	Louisville
McComb, Hoyts Sherman	E. E.	219½	41	Columbus
*McEowen, Hugh Elsworth	C. E.	210½	17+9	Greenville
*McFarland, Horace M.	E. M.	208	97	Columbus
McIntosh, Roscoe Everitt	E. E.	219	158+5	Ravenna
McKeon, Robert Dale	C. E.	209	99	Arcanum
*McKinlay, William Shields	E. E.	218	7	Denver, Col.
*McMullin, Roy	E. E.	219½	24	Columbus
*McOwen, Thomas	C. E.	210½	47+34	Ovid
*McWhinney, Harry Ozias	E. E.	219½	18½+15	Lewisburg
*Nauss, Ralph Welty	Chem.	202	153	Greenville
Needham, Harry Smithson, M. E.		...	...	Columbus
Nicholson, Charles Marion, M. E. in E. E		...	...	Columbus
*Nidy, Herbert C.	E. E.	219	162+2	Greentown
Nobles, Edwin Earl	†C. E.	...	24	Flint, Mich.
Nold, John H., E. M.		...	...	Columbiana
*Nye, Ralph D.	E. E.	219½	52	Zanesville
Ogden, Ellsworth	M. E.	223½	64½	Columbus
*Ohliger, Clyde C.	C. E.	210½	14	Wellsville
Osborn, Liphe Andrews	M. E.	223½	47	Columbus
O'Shaughnessy, Joseph	I. A., S.	...	96	Columbus
*Panter, Thomas Alfred	E. E.	218	104	Niagara Falls,
*Parkin, William Z.	M. E.	222	77	Columbus [N.Y.
Parrett, Benjamin Creamer	Chem.	208	91	Washington C.H.
Patton, William Arthur	M. E.	223½	9½	Circleville
Peck, Alfred Steven	Mining, S.	91	53	Cleveland
*Perks, George Wheldon	M. E.	222	85	Springfield
Peterson, John William	Arch.	217½	54½	Port Clinton
Pleukharp, Erwin Hiram	I. A., S.	91	42	Columbus
Pope, Mrs. Edna L.	Special	...	2	Columbus
*Post, Malcolm Phelps	Cer.	211	83+10	St. Louis, Mo.
Poto, Frank B.	Chem.	202	167	Alliance
Potts, Royal Warren	†C. E.	...	29	Columbus
Pratt, Fred Kellogg, C. E.		...	...	New Philadelphia
Price, Fred Raymond	E. E.	219½	34½	Columbus
Reed, Nathaniel Garfield	M. E.	223½	55½	Youngstown
Reel, Walter C.	C. E.	210½	9½+3	Columbus
Rennard, John Hiram	Mining, S.	91	44+1	Wheeling, W.Va.
*Riebel, Leroy Clemens	Arch.	217½	37½	Columbus
Rightmire, Robert Elwood	M. E.	222	120+6	Wheelersburg
Ritchie, George Alexander	C. E.	210½	38½	Hudson
Robinson, Robert Thane	E. E.	219½	17½	Bryan

† Pursuing a special course.
* Preparatory work incomplete.

	Course	Course Hours	Credit Hours	Home Address
Rogers, Rutherford Hayes	E. E.	218	46+5	Columbus
*Romick, Howard Samuel	M. E.	223½	...	Hilliards
*Ross, Calvin Burt	E. E.	219½	55½	Urbana
†*Ross, Edward McKinstry	M. E.	223½	24½	Jerseyville, Ill
*Roth George Lewis	E. E.	219½	16	Port Clinton
*Roudebush Howard John	E. E.	219½	26	Owensville
*Rupert, Jesse Solomon	E. E.	219½	7	New Waterford
*Ryland, Paul Dillen	C. E.	209	189+2	Columbus
Sanderson, Clarence Herbert	E. E.	218	94	Logan
*Sanderson, Ray Rochester	E. M.	208	70+6	Washington C. H.
Sayers, Delbert Bancroft	E. M.	208	105+9	Marits
*Schlafly Raydeon Karl	C. E.	210½	69½	Mt. Eaton
Schoenlaub, Thomas Jacob	C. E.	209	77	Marion
*Schott, Alvin Christian	Chem.	208	56	Massillon
Schreiber, George Ernest, M. E. in E.E.		...	...	Ironton
Schubert, Charles Wesley	C. E.	210½	54½	Columbus
Schwab, Frank Wilbert	Chem.	208	94	New Philadelpiha
*Scott, Cyrus Ellison	E. M.	209½	39½+9	Columbus
Scott, James Blaine	E. E.	219½	10½	Batavia
Senter, Herbert Pike	C. E.	209	104	Columbus
Sessions, Elizabeth	Special	...	...	Columbus
Sharp, John McDowell	C. E.	210½	36½+2	Columbus
*Shaw, Lucian	C. E.	209	72+3	West Lafayette
Shepherd, Charles William, C. E.		...	...	Huron
Sherman, John K.	C. E.	209	154	Columbus
*Sherwood, Frank Porter	†E. E.	...	128	Ashtabula
Shumate, Frank Douglass	M. E.	222	94+2	Urbana
Siddall, John William	Mining, S.	91	45	Streator, Ill.
*Sigrist, Charles Ferdinand	C. E.	210½	42½+10	Congress
*Simpson, Henry Jerome	C. E.	209	58+3	Worthington
*Singer, Lewis Parmlee	E. E.	219½	16½	Lewisburg
*Sinks, George Theodore	M. E.	223½	20	Youngstown
Smith, Harry Ford	M. E.	222	109	Lexington
Smith, Roy Brooke	M. E.	223½	56½+2	Columbus
Sosman, Robert Browning	Chem.	209½	56½	Chillicothe
Sowers, Emory Blose	I. A.	222	52	Westville
Spangler, Thomas McClellan	†C. E.	...	23	Pleasantville
Sproat, Amasa Delano	E. M.	208	107+8	Chillicothe
Stanton, Frederic Moses	Chem.	209½	21+15	Ridgeville
Starbuck, John Clancy	I. A., S.	96	16	Somerton
*Sterling, James Gilman	M. E.	222	101	Springfield
*Stocker, James Arthur	C. E.	209	104	Gnadenhutten
Stone, Thomas Wade	M. E.	222	100½	New Bremen
Stout, Wilber	Cer., S.	90	40+15	Sciotoville
Strong, Harry Miller	†Min'g, S.	...	39	Wilkesville
Strong, Jonathan Edgar	M. E.	223½	16½	Columbus
*Stull, Raymond Thomas	Cer.	211	101	Elkland, Pa.
*Talbot, Edgar Carl	E. E.	219½	...	Columbus
*Tanner, Edward Wood	M. E.	222	104	Zanesville
Taylor, William Oliver	E. E.	219½	55½	Urbana

† Pursuing a special course.
* Preparatory work incomplete.
‡ Died August 13, 1900.

	Course	Course Hours	Credit Hours	Home Address
*Templin, John Richard	E. E.	219½	42½	Salem
Thomas, Alfred Redman	Mining, S.	91	87	Glouster
*Thomas, Edward	Chem.	209½	37½	Navarre
*Thornton, Nyman	M. E.	223½	47½	Wyoming
Trish, George	Mining, S.	91	88	Nevada
Tubbs, Alfred Stowe	Mining, S.	91	38	Tubbsville
*Tudor, Glenn E.	C. E.	210½	42½+3	Chicago
Tyler, John Sherrerd	M. E.	223½	42+12	Dayton
Van Dyke, Clifford Steel	E. E.	219	160	Ansonia
*Van Schoyck, Ray	M. E.	223½	...	Hilliards
*Van Tine, Charles Hovey	M. E.	223½	62	Tiffin
Vosskuehler, Joseph Henry	M. E.	...	...	Dayton
*Waddell, Starling	E. E.	218	55	Columbus
*Walker, Walter Hamilton	E. E.	219½	2	West Canaan
*Walsh, George E.	M. E.	223½	13	Columbus
*Ward, Samuel Edwin	M. E.	223½	56	Green Spring
*Ward, Vernon C., Jr.	M. E.	222	72	Columbus
*Warnock, David Ross	E. E.	219½	4½	Urbana
*Webber, Frank Merrill	E. E.	219½	32	West Richfield
Weber, Frederick Clarence	Chem.	202	138	Evanston
*Weidman, Charles Albert	E. E.	219½	21	Navarre
*Weiss, William Winfred	C. E.	210½	33½	Canal Dover
Wellbaum, Arvy E.	M. E.	222	109	Brookville
*Wells, Ralph P.	M. E.	223½	14½	Lisbon
*Whetsel, Emerson Jay	C. E.	209	82+5	Jackson
*White, Frederick Lewis	M. E.	223½	...	Gambier
Wiel, Arthur Bernard	Special	...	17	Cleveland
Wilcox, Carl Clifford	M. E.	223½	47	Columbus
*Wildermuth, Troy Dreslan	M. E.	223½	2	Columbus
Williams, Harry Ernest	M. E.	222	109	Harlem
*Williams, Howard Insco	C. E.	209	39+4	Dayton
Williamson, Homer Davison	Chem.	202	179	Monroe
*Wilson, James Sommerville	M. E.	222	162+22	Columbus
Winger, Stanley DuBoise	M. E.	222	92½	Springfield
Wittich, Manuel	Cer., S.	90	20+5	Mt. Sterling
Wolf, Richard Ludwig	Cer., S.	90	45+17	Detroit, Mich.
Wright, John	Cer., S.	90	20	Antrim, Pa.
Wright, Lawrence Robert	E. E.	219½	30½+18	Gambier.
Wright, Otis H.	E. E.	219½	47½	Worthington
*Wyer, Samuel S.	M. E.	223½	48½	Barberton
Yost, Benjamin Franklin	†Min'g, S.	...	...	Columbus
Yost, Lloyd	M. E.	222	103	Somerset
Youmans, W. Raymond	E. E.	219½	53½	Pataskala
Zbinden, Hermann Christian	C. E.	210½	130+6	Toledo
*Zeller, Ralph	E. M.	209½	66½	Ottawa
Zwerner, Fred George	E. E.	219½	54+6	Columbus

† Pursuing a special course.
* Preparatory work incomplete.

COLLEGE OF LAW

UNDERGRADUATES — 201

	Year	Home Address
Addison, Arthur Everet	Third	Columbus
Addison, Clarence Maywood	Third	Columbus
Alvord, Justus Elvin	Second	Bryan
Amos, Frank Craig	Second	Sidney
Anderson, Ralph	First	Dennison
Armstrong, Russel Livingston	Third	Celina
Arnold, Harry Crumley	Second	Columbus
Ashman, Frank	Second	Coshocton
Baggott, Roland Webb	Third	Dayton
Bamer, Merton Leonard	Second	Grand Rapids
Barnet, Clarence Elwood	First	New Paris
Beatty, Robert Jay	Second	Cardington
Bechtol, John M	First	Fayette
Beetham, Rupert Rennison	Third	Cadiz
Benedict, Charles Yeddo	Third	Mansfield
Berry, Edmond Franklin	Second	Celina
Bininger, James Wolfgang	Third	Lancaster
Bock, Theodore E	Second	Hamilton
Bolton, Thomas Bennett	First	Cleveland
Bostwick, Homer Z	First	Columbus
Bowden, Harry W	Special	Minerva
Bowers, Walton S	Second	Hamilton
Branum, Frank C	First	Bridgeport
Bright, Frederick Ijams	Third	Logan
Brown, Albert Marion	First	Wauseon
Brown, James Earl	Second	De Graff
Burgess, James Henry	Second	Big Horn, Wy.
Burkey, Charles Paul	First	Pleasantville
Byers, William E	Third	Loudonville
Calderwood, Charles Barton	Second	Columbus
Calkins, Frank Elwood	Third	Grand Rapids
Calvin, Anthony B	Third	Youngstown
Carey, John T	Second	Upper Sandusky
Cary, Charles Ross	Third	Millersburg
Clark, Lawrence Hayes	First	Cumberland
Clark, William Whittier	First	Canton
Clum, Harry Ernest	Second	Thornville
Cockerill, Orville Porter	First	Washington C.H.
Courtright, Thurman Thomas	Third	Greencastle
Crawford, William Harry	Third	Massillon
Croll, Alfred Jacobs	Third	Tontogany
Crout, Ray Durand	First	Columbus
Cullen, William Barnes	First	Hamilton
Curran, Bernard Franklin	Second	Corning
Damon, Owen H	Special	Hinckley
Darby, Roscoe Bryant	Third	Wauseon
Dawson, Nathan Charles	Second	Columbus
Determan, Hugo Philip	First	Columbus
De Witt, Claude Bennett	Third	Sandusky

	Year	Home Address
Donley, Russell Lee	Third	West Bedford
Doud, Harry L.	Second	Norwalk
Downing, Earl Summerville	Second	Middleport
Du Bois, Aaron Smock	Third	Franklin
Duff, Alfred L	Second	Port Clinton
Dunlap, Carl Reed	Second	Columbus
Eagleson, Joseph Pentecost	First	Columbus
Euans, William Weldon	First	Columbus
Evans, Thomas Daniel	First	Newark
Feibel, Louis	Second	Hillsboro
Fippin, Elmer Otterbein	First	Galloway
Frankenberg, Don Juan	Second	Tempe, Arizona
Foster, George Gruel	First	Columbus
Friedlich, Alfred	Third	Troy
Galloway, Arthur Clyde	Second	Columbus
Gardner, Howard Julius	First	Kent
Graven, D. Homer	Third	Nashville
Haberer, Harry Andrew	Second	Dayton
Hahn, Howard Edward	Third	Coshocton
Hammond, Frank Nathan	Second	Smithfield
Hammond, Frederic Mathas	Second	Smithfield
Hancock, Winfield Scott	Third	Marietta
Harper, Ellahue Ansile	Third	Columbus
Harris, Claudius Earl	First	Martinsville
Hershey, Harry Hartman	Third	East Greenville
Hertlein, John F	Third	Sandusky
Hite, William A	First	Thornville
Hornbeck, Ross Garfield	First	London
Houss, Eugene Augustus	First	Wapakoneta
Howells, George A	Third	Massillon
Hummell, Edwin Ray	First	Carroll
Jacobs, Horace K	Third	Waynesville
Jahn, Nan	Third	Columbus
Johnson, Charles Foster	First	New Albany
Jones, Abbe Linhart	Second	South Zanesville
Jones, David Thomas	First	Youngstown
Jones, Hanby Raymond	Second	Westerville
Jones, Victor Waite	First	Columbus
Judge, James	First	Columbus
Keating, David Thatcher	First	Columbus
Keith, Donald Roscoe	First	Spencerville
Kellison, Edward Lafayette	Third	Quincy
Kennard, Oron Ellsworth	First	Chester Hill
Kinzel, Harry Gilbert	Second	Eagleport
Kistler, Charles Edward	First	Carroll
Kistler, Jonathan Aaron	First	Carroll
Lane, Quinton R.	Third	Canal Winchester
Lash, Henry Lloyd	Second	Bolivar
Laybourne, Lawrence E.	First	Springfield
Layne, Andrew J.	Second	Ironton
Leonard, Ralph Sherman	First	Granville
Lloyd, Erastus Guy	Second	Westerville
Long, Albert Taylor	First	West Carrollton

	Year	Home Address
Loup, Thomas M.	Third	Steubenville
Lynch, John Woods.	Second	Greenville
Mallow, Lewis Earl.	Second	Washington C. H.
Marquis, Fred Samuel.	Third	Mansfield
Mattison, George C.	Second	Wauseon
Meier, William Henry.	Third	Mt. Carmel
Melick, Neal A.	Special	Columbus
Minshall, Thaddeus Ellis.	Second	Chillicothe
Minshall, William Edwin.	Third	Coshocton
Moore, Henry Curtis.	Third	Bainbridge
Morgan, Lewis W.	Third	Gibsonburg
Morris, Ingle Alman.	Third	Columbus
Murphy, Frank Hayes.	Second	New Comerstown
McCleary, Clayton Asa.	Third	Science Hill
McClure, Robert Edward.	Third	Dayton
McCray, Thomas Yates.	Third	Mansfield
McCulloch, Roscoe Conkling.	First	Millersburg
McGarry, James F.	First	East Liverpool
Nesbitt, David M.	First	Bellaire
Nevin, Lurton K.	First	Dayton
Nicholas, Edward Mithoff.	First	Columbus
Nicholas, William Renfrew.	Second	Columbus
Nicola, Benjamin Di.	Third	Barnhill
Norpell, Ralph	Second	Newark
Peck, Foreman Jacob.	Third	Clarksburg
Pence, William D.	Second	Columbus
Plagman, Lester W.	First	Fremont
Polk, Winfred Whittington.	Third	New Vienna
Poole, Loren Winfield.	First	De Graff
Pratt, Fred Kellogg.	Special	New Philadelphia
Price, Jonathan A.	Second	Chili
Ramsey, Russell Kenney.	Second	Columbus
Ranney, Jesse Fred.	First	Columbus
Reed, Bert	Second	Piqua
Rightmire, George Washington.	Second	Wheelersburg
Roebuck, Carl Fletcher.	First	Dalton
Royon, Joseph Charles.	First	Houston
Ryland, Paul Dillen.	Special	Columbus
Sackett, Carl Leroy.	Second	Big Horn City, [Wy.
Sampson, John Henry.	First	Columbus
Scarlett, Henry Launcelot.	First	Columbus
Schantz, Edwin Michael.	First	Zimmerman
Schoedinger, Frederick H.	First	Columbus
Schwenck, William Jennings.	Third	Kenton
Shaw, John William.	Second	Troy
Sheetenhelm, Curtis Cicero.	First	Columbus
Sheetz, George W.	First	New Washington
Shepherd, Charles William.	Special	Huron
Shepherd, George Harvey.	Second	Dayton
Shoemaker, William Allen.	First	Zanesville
Shotwell, Franklin Albert.	First	Marengo
Sigrist, Charles Ferdinand.	Special	Congress
Skiles, Roscoe Carleton.	Second	Shelby

	Year	Home Address
Smith, Wellington Cornell	Second	Lytle
Snow, Mason J	First	Columbus
Southworth, Ferdinand Leek	Third	Alliance
Sparks, Homer H	First	Columbus
Sprague, William Ralph	Second	Columbus
Springer, Nevada Weston	First	Columbus
Spurrier, Emery Allen	First	Chester Hill
Steinemann, George Charles	First	Minster
Sterrett, Frank Marion	First	Troy
Stevenson, Amos Claude	Third	Fostoria
Stewart, Gabrielle Townshend	Third	Cleveland
Stoolfire, Henri Stanton	Third	Columbus
Strader, Maynard	First	Zuber
Tangemann, Theodore H	Second	Ketterville
Tanner, John Robert	Third	Mt. Sterling
Taylor, Everett Buren	First	New Albany
Taylor, Frank Stewart	First	Alliance
Terwilliger, Meeker	Second	Circleville
Thomas, Herbert Spencer	First	Wheeling, W.Va.
Tipton, Robert	First	Milo
Toland, Harford Aquilla	Third	Columbus
Turner, Edward C	Second	Columbus
Veneman, Nevin Edward	First	Dayton
Voegele, William Frederick, Jr	Third	Mansfield
Wakefield, George W	Second	Reynoldsburg
Walker, Mary Ray	First	Dayton
Warden, Hosea Gilford	Second	Columbus
Wertz, Edward Sleeser	Third	Dalton
West, Frederick Rollin	Second	Columbus
Westwater, James Gulick	First	Columbus
Wharton, Homer Franklin	Second	Washington
Wheeler, Newberry William, Jr	Second	Portland
Williams, John William	Second	Roseville
Williams, Lloyd Thomas	Third	Jackson
Williamson, Allen Thurman	Second	Grandview
Wilmot, Charles Austin	Third	Claridon
Wilson, Frank	Third	Jolly
Wilson, Lewis Ernest	First	Columbus
Wise, Charles Clifton	First	Millersburg
Wolf, Edward Christofer	First	Circleville
Woods, Charles Howard	Third	Chillicothe
Worcester, Wood Frank	First	Columbus
Worman, Horace Dye	Second	Dayton
Wulff, August R	Second	Dayton
Yockey, Paul B	Third	Columbus
Young, Samuel N	Third	Lima

COLLEGE OF PHARMACY

UNDERGRADUATES — 39

	Course	Course Hours	Credit Hours	Home Address
*Ashinger, William E.	Long	208½	...	Uphur
Barrick, Alfred Ashberry.	Special	...	144	Columbus
Block, Arthur William.	Short	112	49	Galion
Bodman, Edgar Sereno.	Long	208½	49½	Bement, Ill.
*Bowen, Charles Flood.	Long	206	171+24	Columbus
Briggs, Claude Nicholas.	Short	112	...	Briggsdale
Canfield, Delos Wilford.	Short	112	105+26	Chardon
Cassady, Clyde Brint.	Short	112	69	Alliance
Crosson, Stanley Berry.	Short	112	40	Blanchester
Day, Levi Wille.	Short	112	...	Mt. Oreb
*Funk, Roy William.	Long	206	137+12	Chesterhill
Gardner, Charles Alfred.	Short	112	107	Danville
Haudenschild, Harry J.	Short	112	43+6	Loudonville
Harvey, Lucy Manola.	Short	112	107+60	Pomeroy
Hollingsworth, Clyde Evans.	Short	112	37	Mt. Gilead
Hoover, Walter Emmett.	Short	112	67	Ashville
Horst, Herman Henry.	Short	112	28	Marysville
Hurst, Grace	Short	112	...	Piketon
*Keller, Charles Franklin.	Short	112	38	Arcanum
Kerr, Franklin Pierce, Jr.	Special	...	110+19	Columbus
Kimberly, Charles Hubbell, B. Sc.		...	...	N. Fairfield
Knowlton, Fred A.	Short	112	57	Granville
Krebs, Otto	Short	112	48	Cleveland
Lefferson, Charles Henry.	Short	112	36+10	Middleton
Morris, Harry Long.	Special	...	161	Springfield
*Naddy, Charles Joseph.	Long	206	114	Columbus
Oglesby, Nicholas Perkins.	Short	112	102+6	Lucretia, Va.
Phillips, James McIlvaine.	Special	...	3	Columbus
Pope, Harry Bentley.	Short	112	53	E. Liverpool
Roush, Katherine Layzelle.	Short	112	10	Syracuse
Sherman, James Garfield.	Short	112	38+12	Columbus
Snyder, Roy Bernard.	Short	112	43	London
Squire, Clarence W.	Short	112	73	Ashville
Stoelzel, Julius Frederick.	Short	112	15	Loudonville
Tracy, John Baptist.	Short	112	68	Circleville
Wagstaff, Harry Garfield.	Special	...	112	Niles
Ware, George H.	Short	112	20	Dayton
Webb, Edward Nathan.	Long	206	113	Rome
Young, Cyrus Homer.	Long	206	118	Wooster

* Preparatory work incomplete.

COLLEGE OF VETERINARY MEDICINE

GRADUATE STUDENTS—5

	Home Address
Clawson, Clarence Alfred, B. Sc. (Agr.)	Okena
Hanawalt, David Christopher, V. S. (Ontario)	Greenfield
Hart, Arthur Clark, V. S. (Ontario)	West Richfield
Imes, Marion, B. Sc. (Agr.)	Bashan
Murray, Frank Erskine, D. V. M.	Greenfield

UNDERGRADUATES—17

		Course Hours	Credit Hours	Home Address
*Auer, Curtiss		172	18	Lewisville
Brown, Harry Wilbur		172	54	Columbus
Eddy, William D. V. M.		...	...	East Cleveland
*Forrester, Harry Arthur		172	54	Reynoldsburg
*Griffin, Frank		177	165	Columbus
Hammond, Harry James, D. V. M.		...	...	Sharon
*Henderson, Charles Logan		172	54	Crescent
*Irwin, Albert N.		177	112	Columbus
*Johnson, Theodore Charlemagne		177	106	Akron
*Lamb, Morgan Baxter		172	34	Barlow
*Metzger, Edward Louis		177	108	Louisville
Morrow, Charles James, D. V. M.		...	...	Tiro
*McClelland, Robert Lyle		172	66	Andover
*Pettiford, Oscar Collins		172	54	Wauseon
*Sater, Clinton Huron		172	54	Sater
*Severn, Warren		172	54	Cuba, N. Y.
Worcester, Warner	Special	...	186	Columbus

* Preparatory work incomplete.

GENERAL SUMMARY

COLLEGE OF AGRICULTURE AND DOMESTIC SCIENCE—		
Graduate Students	4	
Undergraduates	153	
		157
COLLEGE OF ARTS, PHILOSOPHY AND SCIENCE—		
Graduate Students	25	
Undergraduates	419	
		444
COLLEGE OF ENGINEERING—		
Graduate Students	11	
Undergraduates	394	
		405
COLLEGE OF LAW—		201
COLLEGE OF PHARMACY—		39
COLLEGE OF VETERINARY MEDICINE—		
Graduate Students	5	
Undergraduates	17	
		22
Total		1,286
Names counted twice		16
Net total		1,252

SUMMARY BY COUNTIES

Adams	1	Guernsey	4	Morrow	6
Allen	5	Hamilton	13	Muskingum	18
Ashland	9	Hancock	3	Ottawa	3
Ashtabula	11	Hardin	3	Paulding	1
Athens	8	Harrison	5	Perry	13
Auglaize	10	Henry	5	Pickaway	14
Belmont	9	Highland	4	Pike	2
Brown	2	Hocking	3	Portage	8
Butler	14	Holmes	5	Preble	10
Carroll	3	Huron	9	Putnam	4
Champaign	14	Jackson	11	Richland	10
Clark	10	Jefferson	9	Ross	24
Clermont	12	Knox	17	Sandusky	4
Clinton	8	Lake	3	Scioto	6
Columbiana	16	Lawrence	6	Seneca	10
Coshocton	13	Licking	22	Shelby	3
Crawford	5	Logan	10	Stark	22
Cuyahoga	15	Lorain	8	Summit	9
Darke	6	Lucas	6	Trumbull	6
Defiance	1	Madison	17	Tuscarawas	12
Delaware	6	Mahoning	9	Union	12
Erie	16	Marion	6	Vinton	3
Fairfield	20	Medina	9	Van Wert	2
Fayette	14	Meigs	11	Warren	7
*Franklin	423	Mercer	2	Washington	5
Fulton	9	Miami	16	Wayne	11
Gallia	8	Monroe	2	Williams	5
Geauga	6	Montgomery	39	Wood	7
Greene	9	Morgan	11	Wyandot	2

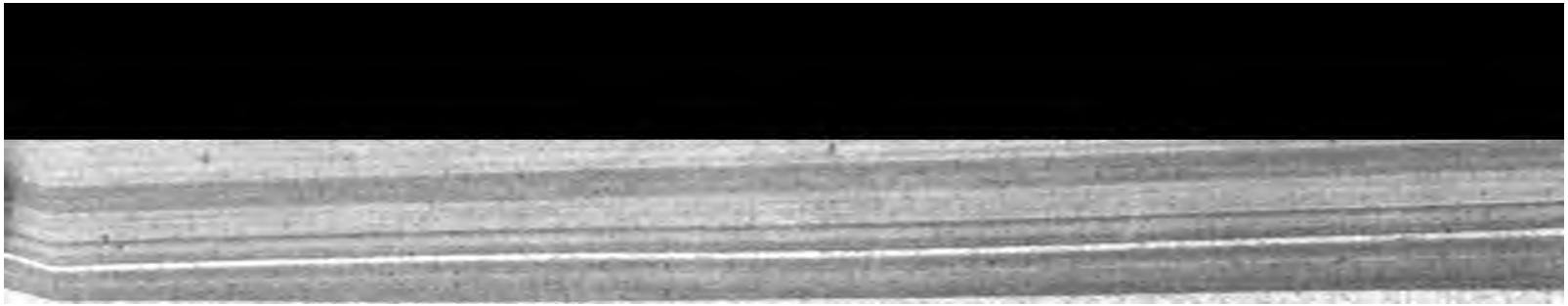
SUMMARY BY STATES AND COUNTRIES

(As far as known)

Alamaba	1	Iowa	1	Ontario	1
Colorado	2	Kentucky	2	Oregon	1
Cuba	1	Michigan	5	Pennsylvania	6
Georgia	1	Missouri	1	Virginia	3
Germany	1	New Jersey	1	Washington, D. C.	2
Illinois	9	New York	6	West Virginia	7
Indiana	2	Ohio	1197	Wyoming	2

*Nearly forty-two per cent. of the students registered from Franklin county are those whose homes are at Columbus only during their University course.

GRADUATES



GRADUATES

The faculty of the Ohio State University are anxious to place a copy of each annual catalogue in the hands of every graduate. They will esteem it a favor of any alumnus who changes his residence will notify the Executive office of his new address and occupation. They will also be grateful for any information from any source, that may assist in making or keeping the Directory of the Alumni complete and correct.

ALUMNI ASSOCIATION

OFFICERS FOR 1900–1901

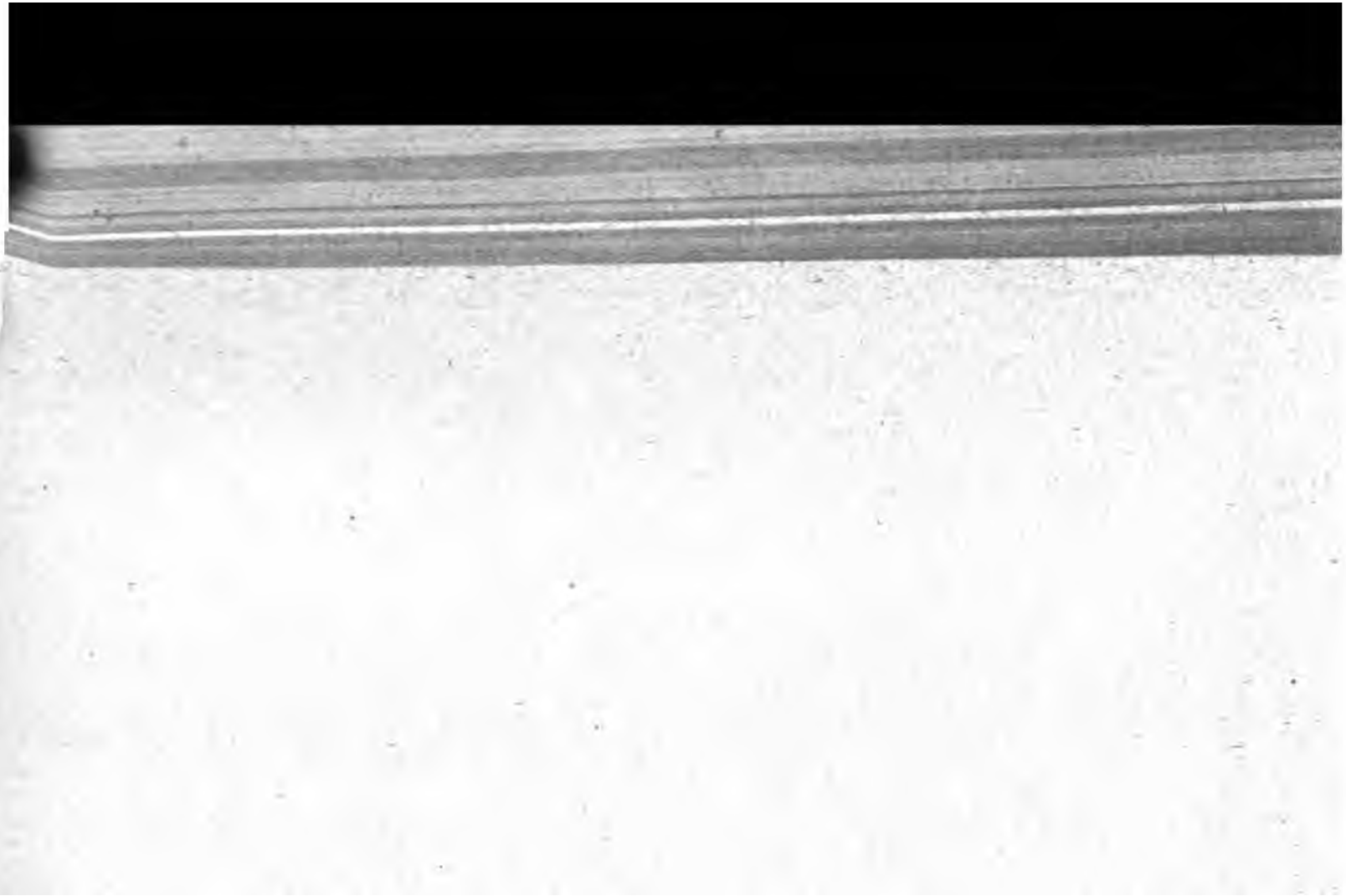
MRS. ANNIE W. SIEBERT, '84, Columbus.....*President*
FRANK RAY, '87, Columbus.....*Vice-President*
LOWRY, F. SATER, '95, Columbus.....*Secretary*
MIRON A. SMITH, '92, Columbus.....*Treasurer*
G. GLEN ATKINS, '88, Greenfield, Mass.....*Orator*

COMMITTEE ON COLLEGE AFFAIRS

FLORIZEL SMITH, '80, Columbus.....Term expires 1901
MRS. HARRY I. ABBOTT, '93, Columbus..... " 1902
LORING HAPGOOD GODDARD, '92, Manora, Ohio..... " 1903
KARL T. WEBER, '97, Columbus..... " 1904
BERTHOLD A. EISENLOHR, '98, Corning..... " 1905

COMMITTEE ON NECROLOGY

LOWRY F. SATER, '95, Columbus.....Term expires 1901
DAISY M. SCOTT, '87, Columbus..... " 1902
EDWARD J. CONVERSE, '86, Columbus..... " 1903



DIRECTORY

A

Abbott, Arthur Grant, 1899, B. Sc. (Agr.), Medina.
Abbott, Royal A., 1900, B. Ph., Columbus.
Ackerman, Eli Osborn, 1884, C. E., 2664 North High street, Columbus, Columbus Street Railway Co.
Ackerman, Fremont, 1883, C. E., Los Angeles, Cal., civil engineer.
Addison, Arthur Everett, 1895, B. Ph., 1900, LL. B., Columbus, teacher East High School.
Addison, Louis Granville, 1892, LL. B., Columbus, attorney-at-law.
Addison, Clarence Maywood, 1896, B. Ph., 1900, LL. B., Columbus, teacher Central High School.
Agler, Eulalia, 1895, G. Ph., Columbus, with Columbus Pharmacal Company.
Albert, Louisa Mary, 1895, B. A. (Ohio Wesleyan University), 1896, G. Ph., Mrs. A. E. Vinson, Columbus.
Aldrich, Chester H., 1888, B. A., LL. B., David City, Neb., attorney-at-law.
Aldrich, Edgar S., 1897, M. E. in EE., Proprietor and Manager Electric Light Plant, Waynetown, Ohio.
Alexander, St. Clair, 1893, M. E. in EE., Bridgeport.
Alexander, Charles P., 1896, M. E. in EE., Canton, O., District Manager Northwestern Mutual Life Insurance Company.
Allaman, William Ernest, 1896, G. Ph., Columbus, Student O. M. U.
Allen, Edward Harrison, B. A. (Ohio Wesleyan University), 1899, LL. B., Lena.
Allen, Lucy, 1897, B. A., 1900, M. A., Columbus, library assistant, State University.
Alsdorf, Percy Reed, E. M., Central City, Col., Standard Assay office.
Alsdorf, Frederick Charles, 1892, E. M., Central City., Col., Superintendent Mt. Wilson Gold and Silver Mining Co.
Alspach, Rufus Edwin, 1897, M. A. (B. A. Heidelberg), Thornville.
Anderson, James T., 1884, B. A., Colorado Springs, Col., 1st Lieutenant U. S. Army.
Anderson, Newton M., 1879, B. Sc., Cleveland, Principal of the University School.
Andress, Edna A., 1900, B. Ph. (Mrs. Julius Stone) Columbus.
Andrews, Albion Joseph, Jr., 1893, LL. B. (B. S., Ohio Wesleyan University), Zanesville.
Andrews, Lincoln Elmer, 1893, LL. B., 1895, B. Ph., Columbus, attorney-at-law.
Armstrong, Edna, 1897, B. Ph., Columbus.
Armstrong, William H., 1890, G. Ph., Marysville, druggist.
Arnold, Charles Lincoln, 1890, B. Sc., 1894, M. Sc., West Eighth ave., Columbus, assistant professor in mathematics, State University.
Arnold, Edwin E., 1898, M. E., Westinghouse Machine Co., Pittsburg, Pa.
Atkins, G. Glenn, 1898, B. A., Greenfield, Mass., pastor Congregational Church
Atkinson, Warren, 1899, M. E., Tester of steam pumping engines at works of H. R. Worthington, Brooklyn, N. Y.
Auld, James A., 1897, M. E. in EE., Columbus, with D. S. Auld, 76 East Gay street.
Austin, John Gustave, 1899, LL. B., Sparta.

B

Bachtell, Nellie May, 1895, B. A., New London, teacher.
Backhaus, Henry Ward, 1894, B. A., Wapakoneta, cashier People's National Bank.
Baer, Philip, Jr., 1897, B. Sc. (Agr.), Canal Dover, Dairy Farmer.
Bagley, Anna Gertrude, 1894, G. Ph., Columbus, with Hallwood Cash Register Company.
Baker, James Burt, 1898, LL. B., Salem.
Baker, John Ezra, 1897, B. A., 1898, LL. B., St. Paris.
Baker, William Hollister, 1892, B. Agr., Hazelhurst, Mo., farmer and stock raiser.
Baldwin, Elizabeth Grant, 1899, B. Ph., Columbus.
Baldwin, Zoa Belle, 1896, B. A., Neil Av. Columbus.
Ball, Emma Leanna, 1895, B. Sc., 1896, M. Sc., Columbus.
Ball, Fred S., 1888, B. Ph., Montgomery, Ala., attorney-at-law.
Bancroft, Gay, 1898, B. A., Columbus, 26 West Gay street.
Barcus, Eliza D., 1900, B. A., Columbus.
Barcus, Miner, 1897, M. E., in EE., Schenectady, N. Y., with General Electric Company.
Barlow, Helen M., 1898, B. Ph., Columbus.
Barnaby, Charles L., 1898, C. E., 37 South Ninth street, assistant on Engineer Corps, Cincinnati Division, P. C. C. & St. L. Ry.
Barnaby, Josephine, 1896, B. Ph., Warren, teacher.
Barrows, Harry Holbrooke, 1898, C. E., Lexington, Ky., resident engineer Cincinnati Southwestern R'y.
*Bartholomew, Clyde Stanley, 1896, C. E., died June 23rd, 1900.
Basterdes, Ada Mabel, 1890, B. Ph., Plano, Ill., teacher in High School.
*Bates, Josephine M., 1881, B. Ph., Mrs. Florizel Smith, died ——, 1900.
Bates, Wesley, C., 1882, LL. B., 35½ N. High street, Columbus, Attorney.
Baughman, George W., 1897, G. Ph., Springfield, Pharmacist.
Beach, David Price, 1895, C. E., Wellsville, in employ of Pennsylvania Railroad.
Beach, Margaret Alice, 1891, B. Ph., Mrs. Wilson Holman, Bayonne, N. J.
Beardsley, Orsamus D., 1898, B. Ph., Garrettsville.
Beattie, William Renick, 1894, B. Sc., 1897, M. Sc. (in Horticulture), Washington, D. C., U. S. Department of Agriculture.
Beck, Arthur Andrew, 1893, C. E., Columbus, county surveyor's office.
Belden, Sanford Bonner, 1895, E. M., Manager Pittsburg Office Jeffrey Manufacturing Company.
Bell, Florence Louise, 1900, B. Ph., Columbus, 382 East Town street.
Bell, Mary Edith, 1894, B. Ph., teacher in Central High School, Columbus.
Bennet, Henry C., 1890, B. A., 100 Washington street, Chicago, Ill, Attorney-at-law.
Bennett, Samuel E., 1890, D. V. M., Kansas City, Mo., Government Meat Inspector.
Bently, William Preston, 1885, B. Agr. (B. A. 1890, M. A. 1893, Bethany College) 15 Miller Road, Shanghai, China, missionary.
Bertsch, Joseph Franz, 1896, LL. B., Columbus, 124 West Ninth avenue.
Bibbee, George E., 1897, LL. B. (A. B. Ohio Wesleyan University), Columbus, 41 King avenue.
Biebel, Herman Matthews, 1896, M. E. in EE., Chicago, Ill., electrical engineer with Western Electric Co.
Bischoff, John Wallace, 1899, E. M., Thomas, W. Va., assistant engineer Davis Coal and Coke Co.

Bissing, William,,1893, M. E. in EE. (A. B. Johns Hopkins University), examiner in U. S. patent office, Baltimore, Md.
Blackburn, Frank H., 1896, M. E. in EE., Fostoria, Electric Engineer, Fostoria Incandescent Lamp Co.
Blaire, Edward Grey, 1895, G. Ph., Shawnee, pharmacist.
Blakiston, Anna Houston, 1897, B. Ph., Mrs. Powell.
Blakiston, Mary, 1893, B. Ph., Columbus, teacher in East High School.
Blinn, Ray S., 1893, B. S.
*Bloom, Edwin M., 1893, B. Sc., died, 1894.
Bloom, J. George, 1889, C. E., Chillicothe, division engineer B. & O. S. W. Ry.
Bloomfield, Lloyd Morris, 1891, B. Agr., Central America.
Bock, Harrison W., 1898, LL. B., 1899, B. Ph., Canton.
Bockius, Harry Graham, Ph. B. (Yale University), 1899, LL. B., Canton.
Bodman, Mary E., 1898, B. Ph., Bement, Ill.
Boesche, Felix John, 1896, G. Ph., Denver, Col.
Boesel, Frank Tilden, 1896, B. Ph., student, Harvard Law School.
Bogue, Ernest Everett, 1894, B. Sc. H. & F., 1896, M. Sc., Professor of Botany and Horticulture, Agricultural and Mechanical College, Stillwater, Okla.
Bohn, Frank A., 1900, B. Ph., Olmsted Falls.
Bohn, William Edward, B. A. (German Wallace College), 1900, M. A., Olmsted Falls.
Bond, Charles Grosvenor, 1899, LL. B., Columbus, 595 Oak street.
Bone, John H., 1893, B. Sc., 1896, B. Sc. (Agr.), New Richmond, Ind.
Booth, Lucy Adelaide, 1892, M. A. (B. A., Ohio Wesleyan University), 1894, Ph. D., Columbus.
Bope, George W., 1897, LL. B., Columbus, third assistant director of law, 275 East State street.
Bostwick, Homer Z., 1900, B. A., Columbus, Student O. S. U. Law School.
Bowden, Harry W., 1900., C. E., Minerva.
Bower, Jerome G., 1897, M. E., 295 North High, Columbus.
Bownocker, John A., 1889, B. Sc., 1897, D. Sc., Columbus, associate professor of Inorganic Geology, State University.
Boyd, Emma, 1888, B. Ph., 38 W. Woodruff ave., Columbus, teacher in the North High School.
Boyd, James Ellsworth, 1891, B. Sc., Columbus, assistant professor of Physics, State University.
Boyd, James G., 1897, D. V. M. Columbus.
Boyd, Martin L., 1897, LL. B., Columbus, 265 East Eleventh Ave.
Bradford, Ernst, 1892, G. Ph., Columbus, chemist, with N. W. Lord, O. S. U.
Bradford, Joseph Nelson, 1883, M. E., 54 West Tenth Ave., Columbus, associate professor of drawing, State University.
Brand, Harry Frank, 1896, B. Ph., 1897, LL. B., Worthington.
Brandt, James Herbert, 1899, B. A., Greencastle.
Brandt, Ulysses Sherman, 1895, B. A., Canal Winchester.
Braun, Joseph G., 1897, G. Ph., Columbus, 802 South Champion avenue, Pharmacist.
Brelsford, Harley, 1898, B. Ph., Christiansburg.
Brewer, Charles Reed, LL. B., Bowling Green.
Brewer, John Whitney, 1896, G. Ph., Columbus, 126 West Tompkins street., Pharmacist.
Bright, Frederick I., 1900., LL. B., Logan.
Britton, John Carr, 1898, B. Sc. (Agr.), Buffalo, N. Y.
Brier, Harvey E., 1890, D. V. M., Tippecanoe City, veterinary surgeon.

Bronson, Herman S., 1897, LL. B. (B. L., Cornell
Attorney, 120 Wilson avenue.
Brophy, James Francis, 1899, E. M., Sun, W. Va., Sun
Brown, Frank, 1899, M. A. (A. B., Macalester College
High School.
Brown, Frederick W., 1888, E. M., Superintendent of Cc
Co., Florence, Colorado.
Brown, Newton H., 1893, M. E. in EE., Newark, Del.
Engineering, Delaware College.
Bruce, Charles A., 1895, B. A., Columbus, assistant pro
guages, State University.
Brumley, David, 1895, C. E., Louisville, Ky., with L.
Bruning, Henry Dietrick, 1896, C. E. Pittsburg, Pa., e
St. L. R. R.
Buchenberg, Alvin E., 1900, M. E. in E. E., Holgate.
Buckman, Arthur Leslie, 1897, M. E., in EE., Centra
Toledo.
Buckman, Ola., 1895, B Sc. (M. D., Cleveland Universi
gery), Norwalk.
Bunnell, Larone A., 1898, G. Ph., Dayton, Pharmacist.
Burgess, James Henry, 1900, B. Ph., Big Horn, Wy.
Burkett, Charles William, 1895, B. Sc. (Agr.), 1898, M
N. H., professor of Agriculture, New Hampshire S
Burkett, Dora Van Buren, 1897, B. Ph., Columbus.
Burns, James Ferguson, 1891, C. E., Hopkinsville, Ky
& N. Ry.
Burr, Harriett G., 1897, B. A., Worthington.
Butler, James Marion, 1894, LL. B. (A. B., Ohio Wesle
Butterworth, William H., 1898, B. A., Columbus, 45 M
Bygate, Harry Goldsmith, 1899, M. E., Draftsman, H
Homestead, Pa.
Byers, Clara, 1894, B. Ph., Mrs. Coles A. Raymond, Y

C

Cahen, Alfred, 1894, LL. B., Allegheny, Pa.
Calkins, George Herbert, 1895, M. E. in EE., with G
Department, Schenectady, N. Y.
Calkins, William Bartlett, 1898, G. Ph., New Straitsville
Callender, Sherman D., Ph. B. (Oberlin College), 1898
Nasby, Toledo, Attorney.
Calvin, Anthony B. (A. B. Northeastern Ohio Normal),
town.
Canfield, Charles H., 1897, D. V. M., Government
City, Mo.
Canfield, Dorothea Francis, 1899, B. Ph., graduate stude
New York City.
Canfield, Leander Randall, 1896, B. Ph., Chardon.
Capron, Marshall Fremont, 1888, M. E., architect, Cle
Carr, Hugh Stanley, 1896, M. E. in EE., assistant pr
neer, Lawrence, Kansas.
Carr, James Gray, 1897, B. A., Coshocton.
Carroll, Patrick Henry, 1894, E. M., Herrin, Illinois,
and Iron Co.

Carroll, William Hunt, 1894, LL. B., Wilmington.
Carson, Samuel King, 1895, M. E. in EE., M. D. (Ohio Medical University), Acting Assistant Surgeon U. S. A., Manila, P. I.
Cary, Charles R., 1900, LL. B., Millersburg.
Cathcart, Josephine M., 1888, B. Sc., 1131 Cedar avenue, Cleveland, accountant.
Catlin, Homer Clark, 1896, C. E., Bridge Department, N. Y. C. R. R., Grand Central Station, N. Y.
Canaga, George Orlando, 1895, LL. B. (B. A., Scio College).
Cartwright, Henry Gilroy, 1895, LL. B.
Cavanaugh, Andrew F., 1900, M. E., Dayton.
Cellarius, Frederick Julius, 1888, C. E., Dayton, civil engineer.
Chamberlain, Helena W., 1884, B. A., Mrs. Ellis Lovejoy, Union Furnace.
Chalmers, Agnes Florida, 1895, B. Ph., Bay City, Mich., teacher in High School.
Chappell, Walter Evans, 1898, M. E. in EE., first-class electrician, U. S. S. *Chicago*, care U. S. Despatch Agent, New York.
Charters, William Filson, 1887, B. Ph., Sidney, tax inquisitor.
Cherryholmes, W. K., 1881, B. Sc., M. D., Hamilton, physician.
Cilley, Raymond, 1896, C. E.
Clark, Alexander B., A. B. (Yale University), 1899, LL. B., Canton.
Clark, Clarence J., 1899, C. E.
Clawson, Clarence Alfred, 1899, B. Sc. (Agr.), 1900, D. V. M., Okena.
Clay, Albert Arlington, 1893, LL. B. (B. A., Tri-State Normal College), Hicksville.
Claypoole, Bessie Smith, 1895, B. Ph., Columbus, student, 1080 North High St.
Claypool, Charlotte Lake, 1892, B. Ph., Columbus, 1080 North High St.
Clements, Frank Orville, 1899, M. Sc. (M. A., Otterbein University), Westerville.
Clum, George V., 1893, B. A., Mendota, Ill., president of Mendota College.
Clum, Harry Ernest, 1899, B. Ph., Westerville.
Cockins, Edith D., 1894, B. A., Columbus, registrar, State University.
Coddington, Edwin F., 1896, C. E., 1897, M. Sc., fellow in Astronomy, Lick Observatory, Mount Hamilton, California.
Cole, George Nathan, 1891, M. E., in EE., Chicago, Ill., 112 Clark street.
Cole, Marietta C., 1897, B. Ph., Columbus, 897 Franklin avenue.
Collins, Curtis, 1895, M. E. in EE., Salesman, General Electric Co., Baltimore, Maryland.
Coney, William Hawks, 1894, B. Sc., Honolulu, S. I.
Connell, Laura Jewell, 1896, B. Ph., Columbus, teacher of German, 433½ Long street.
Connell, William A., 1886, E. M.
Connor, Alice M., 1900, B. Ph., Columbus.
Connor, Ellen J., 1900., B. Ph., Columbus.
Converse, Edward Jasper, 1886, B. A. (B. D., Yale University), Columbus, assistant pastor, First Congregational Church, 808 North High street.
Converse, Howard Pendleton, 1887, B. Sc., 166 Devonshire street, Boston, Mass., manager Boston office Cooper, Hewitt & Co., steel and iron manufacturers.
Converse, Walter, 1899, B. A., Plain City.
Conway, Hugh Lawrence, 1896, C. E., assistant engineer, Water Works, Cincinnati.
Cope, Albert N., 1897, M. E. in EE., Columbus, foreman Columbus Street R. R.
Corner, Florence, 1897, B. Ph., Columbus, 642 East Rich street.
Corns, Harry, 1887, B. A., Columbus, teacher in Central High School.
Corwin, Edwin E., 1880, B. A., Columbus, attorney-at-law, 1462 Neil avenue.

Cotes, Albert E., 1897, B. Sc., Columbus, medical student, Ohio Medical University.
Courtright, J. Loring, 1900, B. A., Circleville.
Coursault, Ida May, 1899, B. Ph., Columbus, 770 East Long street.
Coursault, Jesse H., 1893, B. A., 1898, M. A., Columbus, teacher in Central High School.
Covell, Vernon Royce, 1895, C. E., Pittsburg, Pa., county engineer's office.
Craig, Moses, 1889, B. Sc. (M. S., Cornell University, 1890), 1896, M. Sc. (H. F.), Auburn, Ala., assistant in Horticulture Experiment Station.
Cratty, John Mason, 1897, B. Sc., Cincinnati, chemist.
Crawford, Ira, Jr., 1893, LL. B. (B. S., Denison University), Dayton.
Crawford, William Sterling, 1888, B. Ph.
Croll, Alfred J. (A. B., Ohio Normal University), 1900, LL. B., Tontogany.
Cromley, Alva M., 1897, G. Ph., pharmacist, Circleville.
Crooks, Charles Melvis, 1892, B. A. (D. D., Harvard University, 1896), Colerain, Mass., pastor Congregational church.
Crowner, Delbert Alonzo, 1896, B. Sc. (Agr.), Wellsville, N. Y.
Cummins, Henry Rollins, 1891, G. Ph., Akron, pharmacist.
Cunningham, Arthur, 1880, B. A., 107 Lincoln street, Columbus, book-keeper.
Cunningham, Edward Walker, 1894, C. E., civil engineer, Schoenberger Wks. Am. Steel and Wire Co., Pittsburg, Pa.
Cunningham, George S., 1886, B. Ph., LL. B., Lancaster, attorney-at-law.
Cunningham, John Ferguson, 189[illegible], B. Sc. (H. & F.), 1899, M. Sc. (H. & F.), Cleveland, assistant editor "Ohio Farmer."
Curtis, Leigh Goodrich, 1899, C. E., Zanesville, Dept. M. of U., B. & O. R. R.

D

Daily, Henry G., 1892, D. V. M., Wooster, veterinary surgeon.
Dally, John Randolph, 1899, LL. B., Centerburg.
Damron, Carson W., 1897, M. E., Columbus, Jeffrey Mfg. Co.
Daniels, David Edwin, 1893, LL. B., B. Ph., Denison University), 1896, LL. M., Columbus, 1326 Madison avenue.
Darby, Roscoe B., 1900., LL. B., Wauseon.
Davenport, Adrian E., 1897, B. A., Columbus, 1449 Franklin avenue.
Davidson, David Millen, 1894, B. A.
Davidson, George Edwin, 1899, LL. B., East Liverpool.
Davies, Jennie C., 1897, B. Ph., Columbus, 590 East Spring street.
Davies, John Lodwick, 1894, LL. B., Columbus.
Davis, Charles William, 1894, E. M., Colorado Springs, Col., care J. Mck. Terriday & Co.
Davis, Oscar Allen, 1897, M. E. in EE., Alliance, draughtsman Morgan Engineering Co.
Davis, Vernon Hays, 1900, B. Sc. (Agr.), Byesville.
Deahl, Walter Smith, 1896, C. E., 268 Fisk St., Pittsburg, Pa., Pittsburg Bridge Co.
Deardurff, Carl Mason, 1895, B. A.
DeLamater, Clayton William, 1884, A. B., LL. B., Omaha, Neb., attorney-at-law.
DeLoffre, Andre, 1896, M. E. in EE., Schenectady, N. Y., Engineering Department General Electric Co.
DeLoffre, Samuel Middleton, 1895, B. A.
Dennis, Jerry, 1892, LL. B., 1893, LL. M., Columbus, attorney-at-law, 690 Franklin avenue.

Derby, Florence Harlow, 1896, B. Ph., Columbus, graduate student, State University, 93 East Fifteenth avenue.
Detmers, Frederica, 1887, B. Sc., 1891, M. Sc., 1315 Neil avenue, Columbus, teacher.
Devol, William Stowe, 1886, B. Agr., Riverside, Cal.
Dice, Jesse Peck, 1898, LL. B., Akron.
Dickinson, Thomas Herbert, 1899, B. Ph., N. Y. City, graduate student Columbia College.
Diemer, Hugo, 1896, M. E. in EE., Greenwood, N. C., professor of mechanical engineering, A. & M. College.
Dietrich, Charles Henry, 1878, B. Sc., with American Book Co., general manager for Kentucky.
Dietrich, George C., 1898, B. Ph., Groveport, principal of High School.
Dill, Dille Augusta, 1900, B. Ph., Columbus.
Doan, Frank C., 1898, B. Ph., Athens, professor of philosophy, Ohio University.
Dollison, Harvey C., 1900, B. Sc., Columbus.
Doney, Carl Gregg, 1891, B. Sc., 1893, LL. B., Delaware, pastor M. E. Church.
Donham, Maurice, 1896, M. E., Struthers, Wells & Co., Warren, Pa.
Donham, William W., 1882, B. Sc.
Dowd, Charles F., 1900, B. Ph., Toledo.
Dresbach, Melvin, 1897, B. Sc., Columbus, Fellow in Physiology, State University.
Drummond, William G., 1900 M. E., Cleveland.
Dubois, Wilbur L., 1900, B. Sc., Columbus, Fellow in Chemistry, State University.
Dun, George William, 1884, B. Sc., Columbus, business manager "Columbus Citizen."
Dun, John J , 1883, E. M., Fifteenth avenue, Columbus, consulting engineer.
*Dun, Walter Angus, 1878, B. Sc., M. D., died November 7, 1887.
Dungan, Irvine Laird, 1892, B. Ph., Cincinnati, Lane Theological Seminary.
Dunlap, Thaddeus Cox, 1895, M. E. in EE., consulting engineer, 8 West Seventh street, Chattanooga, Tenn.
Dunlap, William Renick, 1895, B. Sc., Kingston, farmer.
Dunlap, Robert R., 1900, M. E. in EE., Columbus.
Dunnick, Edward, 1897, C. E., Mt. Vernon Bridge Co., Mt. Vernon, O.
Duvel, Joseph W. T., 1897, B. Sc., Wapakoneta
Dye, Clair, Albert, 1891, G. Ph., Bern, Switzerland, student at University.

E

Eagleson, Grace, 1897, B. Ph., Columbus, 601 Oak street.
Eagleson, John H., 1900., B. A., Columbus, 601 Oak street.
Eagleson, Joseph P., 1900, B. A., Columbus, 601 Oak street, student O. S. U. Law School
Early, Franklin E., 1893, D. V. M.
Easterday, Charles Todd, 1891, G. Ph., Wellston, Druggist.
Eddy, William, 1900, D. V. M., Cleveland.
Edwards, Mary Winifreda, 1897, B. A., New Richmond, Prin. of High School.
Egbert, Knott C., 1890, B. Agr., Yainax, Oregon, Supt. Indian Boarding School
Eisenbise, Bertha, 1900, B. Ph., Columbus.
Eisenlohr, Berthold A., 1898, B. Ph., Corning, mining engineer.
Ellis, Charles, 1898, D V. M., 3230 Locust street, St. Louis Mo., veterinarian.
Emery, Peyton Randolph, 1893, LL. B., London.
Emery, Vernon Judson, 1887, B. A. (A. M., University of Nebraska), Cleveland, assistant professor of Latin, Western Reserve University.

Erf, Oscar, 1899, B. Sc. (Agr.), Champaign, Ill., Instr
versity of Illinois.
Erskine, John H., 1886, E. M., Lowellsville, fire brick
Estep, Frank Leslie, 1898, M. E. in EE., Draughtsmar
American Steel and Wire Co., Pittsburg, Pa.
Evans, Ernest, 1892, B. Sc., Mingo Junction, chen
Steel Co.
Evans, Peter Platter, 1892, C. E., Boston, Mass., witl
Evans, William Lloyd, 1892, B. Sc., 1896, M. Sc., (
teacher of chemistry in High School.
Eysenbach, Ernest E., 1896, E. M., Columbus, Superinte

F

Fairchild, Harmon Scott, 1894, LL. B., Springfield.
Farber, Charles Harker, 1894, B. A., Columbus, with S
Fassig, Oliver L., 1882, B. Sc., Baltimore, Md., ins
Johns Hopkins University.
*Fay, Frederick Willis, 1882, B. A., B. Arch., died Au
Fay, Mona, 1897, B. Ph. (Mrs. Eugene Gee), Wheeling
Feicht, Russell Stimson, 1890, M. E. in EE., Engineerii
house E. & M. Co., Pittsburg, Pa
Feiel, Ida Louise, 1898, B. Ph., Columbus, 520 East M
Fenner, Jessie Albertus, A. B. (Wittenberg College), 189
Fergus, Guy Carlton, 1898, M. E. in EE., partner in Z
Fergus, John Franklin, 1892, LL. B., Columbus, attorr
Fickes, Walter M., 1900, E. M. (Ceramics) Steubenvill
Finley, Harry Marshall, 1894, B. A., McConnelsville, p
Fippin, Elmer Otterbein, 1900, B. Sc. (Agr.) Briggsda
Fischer, Paul, 1891, B. Agr., D. V. M., professor
Manhatten, Kas.
Fischer, Robert, 1895, G. Ph., 1896, M. Ph., 1898,
laboratory assistant, Cornell University.
Fischer, Walter, 1897, B. Sc., Columbus, 810 Franklin
Fish, Fred Alan, 1898, M. E. in EE., Columbus.
Fisher, Clara, 1886, B. A., Mrs. J. Porter Milligan, Col
Fisher, Georgietta, 1895, B. A., teacher in High School
Fisher, Ida May, 1900, B. Ph., Columbus.
Fitzgibbon,, James Robert, 1894, LL. B., Newark.
Fitterer, John Conrad, 1898, B. Sc., Butler.
Flickinger, George A., 1898, B. Sc., (Agr.), Knoxvil
University of Tennessee.
Floto, Julius, 1889, E. M., Chicago, Ill., Monadnoc
Strabel.
Flynn, Benjamin H., 1898, C. E., Columbus, with State
Flynn, Harry Franklin, 1892, C. E., Washington, D.
Coast Survey.
Flynn, Maud, 1896, B. Sc., Columbus, student, Col
40 East Fifth avenue.
Flynn, Oscar Rodgers, 1896, B. Sc., teacher in High S
Foley, William J., 1894, D. V. M., Lexington, Ky.
Ford, Ruth L., 1898, B. A., Ashtabula, teacher in High
Ford, Stanley Hamer, 1898, B. Ph., 1st Lieut. in U. S.
*Forgy, Ralph Morris, 1896, B. Ph., died March, 1899.

Foster, Dudley Hampton, 1895, B. Ph., LL. B., attorney-at-law, Corning.
Foster, Frank McMillan, 1894, M. E. in EE., with John N. Poage, Cincinnati, manufacturer water columns and valves.
Foster, Israel Moore, 1898, LL. B., Athens.
Foulk, Charles William, 1894, B .A., student, in Germany.
Fowler, Harry R., 1894, M. E. in EE., Toledo, electrical contractor.
Fox, Charles P., 1890, B. Agr., 1895, M. Agr., Columbus.
Fox, Frederick Hugh, 1896, B. Ph., McConnelsville.
Fox, John Herbert, 1897, M. E., Cleveland, Brown Hoisting Machine Co.
Fox, Ross G., 1900, B. Ph., Columbus.
Francis, Edward, 1894, B. Sc., M. D. (Ohio Medical College), Assistant Surgeon, U. S. Marine Hospital, Stapleton, S. I., N. Y.
Francis, Mark, 1887, D. V. M., College Station, Brazos Co., Tex., professor of Veterinary Medicine, Agricultural and Mechanical College.
Frankenberg, John Theodore, 1899, M. E., in EE., Columbus, 851 Neil avenue.
Fravel, George B., 1888, M. E., Road Foreman of Panhandle Lines, Cincinnati, O.
Frayer, Lee Ambrose, 1896, M. E., Columbus, Rarig Engineering Co.
Freeman, Stanton Sholes, 1898, E. M., St. Carbon Iron and Steel Co., Parryville, Pa.
French, Thomas Ewing, 1895, M. E., Columbus, assistant professor of drawing, State University, 1458 Worthington street.
Fritchle, Oliver Parker, 1896, B. Sc., Mt. Hope.
Frost, George W., 1900, M. E., Columbus.
Fullmer, Edward L., 1897, B. Sc., 1898, M. Sc., Mitchell, S. D., University of South Dakota, professor of sciences.
Fullerton, Charles Haywood, 1898, B. Ph., Wheelersburg.

G

Gains, Charles E., 1889, B. Ph., London, physician.
Galbraithe, John Howard, 1883, B. Ph., Columbus, journalist, 1087 Oak street.
Gale, Cora C., 1893, B. Ph., Columbus, Oak street, near Grant.
Gale, Franklin Henry, 1893, LL. M. (LL. B., University of Michigan), Columbus, 324 Oak street.
Gallen, William Francis, 1897, M. E., Columbus, Jeffrey Manufacturing Co.
Game, Reed Haskell, 1896, B. Ph., 1899, LL. B., Columbus.
Gamper, Hedwig E., 1900, B. Ph., Columbus.
Gamper, Herman, 1899, M. E., Ingersoll-Sargent Drill Co., Easton, Pa.
Gayman, Charles W., 1900, B. Ph., Van Wert, Principal of the High School.
Garber, Alberta D., 1889, B. Ph., A. M.
Garber, John Murray, 1897, C. E., Columbus, Mt. Vernon Bridge Co.
Garber, Levi L., 1898, B. A., Belleville.
Garst, William Augustus, A. B. (Otterbein University and Harvard University), 1898, LL. B., Westerville.
Gee, Eugene C., 1897, M. E. in EE., Wheeling, W. Va., with Telephone Co.
Gehrkens, Edward Frederick, 1894, M. E. in EE., Schenectady, N. Y., with General Electric Co.
Geissinger, James Allen, 1895, B. A., Pastor Centenary M. E. Church, Ripley, Ohio.
Genheimer, Eli Thomas, 1896, B. Ph., Portsmouth, teacher in High School.
Genheimer, William F., 1897, LL. B., Portsmouth, attorney.
Gibbs, George C., 1893, B. A., Columbus, with Green, Joyce & Co.
Given, James Byron, 1896, M. E. in EE., Western Electric Co., Chicago, Ill.
Givens, Newton Edgar, A. B., 1896, LL. B., Waverly.

Glover, Sioux, 1882, B. Sc., Mrs. Horton, Errid, Pa.
Goddard, Loring Hapgood, 1892, C. E., farmer. Manora, O.
Good, Paul Revere, 1899, B. A., 1900, M. A., Westerville.
Goodell, Ralph Spencer, 1892, C. E., Mt. Vernon, Mt. Vernon Bridge Co.
Goodman, Joseph Clarence, 1896, LL. M., Columbus, 375 East Town street.
Goodman, Sylvester Jacob, 1896, G. Ph., Philadelphia, Pa., student of Medicine, W. & J., Medical College.
Gordon, Adelaide Cummins, 1896, B. Ph., Columbus.
Graham, Emery Eugene, 1898, M. E. in EE., Alliance, Morgan Engineering Co.
Grandle, Frank Albert, 1891, G. Ph., Centerburg, pharmacist.
Grate, Charles Artemis, 1898, M. E.
Graves, William L., 1893, B. A., 1897, M. A., assistant professor in Rhetoric, State University.
Gray, Genevieve, 1898, B. Ph., Columbus.
Gray, James Collam, 1892, LL. B., 1893, LL. M., Pittsburg, Pa., attorney P. R. Ry.
Graven, D. Homer (A. B., Ohio Normal University), 1900, LL. B., Nashville.
Green, Charles C., 1885, B. Sc., M. D., Beaver City, Neb., physician.
Green, Jerome Joseph, 1893, M. E. in EE., Notre Dame, Ind., Notre Dame University, professor of Physics and Elec. Engineering.
Green, Joseph Faust, 1899, M. E. in EE., Moline, Ill., electrical engineer, Moline Electric Elevator Co.
Green, Robert Lee, 1892, G. Ph., Somerset.
Gregg, Frank B., 1889, B. Ph., M. D.
Gregory, Hiram D., 1880, E. M., attorney-at-law, Covington, Ky.
Griffin, Mark H., 1897, M. E. in EE., Xenia, electrical engineer, Soldiers' and Sailors' Orphans' Home.
Griffin, Theodore L., 1889, B. Sc., M. Sc., Columbus, chemist, 760 Mt. Vernon avenue.
Griffith, David Mathias, 1896, LL. B., Kecksburg, Pa.
Griffith, Wellington John, 1892, LL. B., Tiffin.
Griffiths, Benjamin Lincoln, 1898, LL. B., Vaughnsville.
Grimsley, George Perry, 1890, B. A., 1891, M. A. (Ph. D., Johns Hopkins University, 1894), Topeka, Kan., professor Natural History, Washburn College.
Griswold, Lawrence William, 1892, B. A., New York City, London Assurance Co
Groff, Orsylla Ann, 1894, G. Ph., North High street, Columbus, pharmacist.
Groff, Warren Noble, 1896, B. A., 1899, LL. B., Tiffin.
Groves, John Wesley, 1898, C. E., engineer for Sunday Creek Coal Co., Corning.
Gruen, Francis William, 1899, B. Ph., 1899, LL. B.
Guerin, Martha, 1896, B. Ph., Columbus.
Gugle, George Linville, 1896, LL. B., Columbus, attorney.
Gugle, Marie, 1897, B. A., Alexandria, Ind., teacher.
Guittard, Virgil, 1894, B. Sc., New Bedford.
Guitteau, William B., 1897, B. Ph., Toledo, teacher in High School.
Guss, Sherman Hamlin, 1892, B. A., Clarksburg, W. Va., principal of the colored schools.

H

Haas, Frank, 1895, C. E., 1896, E. M., Middlesboro, Ky., Virginia Iron, Coal and Coke Co.
Hagler, Howard, 1889, B. Sc., Washington C. H., farmer.
Haigler, Charles Edmund, 1898, B. Sc., Xenia, O.
Hale, Frederick James, 1898, M. E., 1900, M. Sc., Columbus.

Hall, Harry R., 1889, E. M., Middlesboro, Ky., Virginia Coal, Iron and Coke Co.
Halterman, Oscar Elmore, 1895, LL. B., B. S. (National Normal University).
Hamilton, Charles R., 1893, B. A., Zanesville, Dun's Commercial Agency.
Hamilton, Frank Alexander, 1895, D. V. M., Dubois, Pa., veterinary surgeon
Hammond, Bessie B., 1897, B. Ph., Columbus, 443 Mt. Vernon avenue.
Hammond, Harry J., 1900, D. V. M., Sharon Centre.
Hammond, Rose Lyttle, 1896, B. Ph., Columbus, teacher, 90 North Twenty-second street.
Hancock, Winfield Scott (A. B., Marietta), 1900, LL. B., Marietta.
Hancock, David R., 1889, G. Ph., M. D., Columbus, Physician.
Haney, Thomas Carlyle, 1894, G. Ph., Columbus, pharmacist, corner Schiller and Third streets.
Hannum, William Hamilton, 1897, B. A., India, missionary.
Harbage, Arnett, 1893, D. V. M., West Jefferson, farmer.
Harkins, Robert R., 1900, M. E. Columbus.
Harlor, John David, 1895, B. A., Columbus, teacher in Central High School.
Harper, Ellahue A. (B. A., Ohio Wesleyan University), 1900, LL. B., Columbus.
Harris, Charles Pearl, 1899, B. Ph., West Liberty.
Harris, Frank Laverne, 1894, LL. B. (Ph. B., Tri-State Normal University), Payne.
Harris, Walter Conger, 1893, B. Sc., New York, with Art Department of Herald, 104 West 114th St.
Harrison, Warner, 1892, LL. B., East Town street, Columbus, attorney and solicitor C., A. & C. Railway.
Harrison, William Henry, 1885, C. E., Butte, Montana, assistant engineer Butte City Water Works.
Harrold, Ernst Ellwood, 1895, G. Ph., dispenser chemical store-room, State University.
Harrop, Herbert Bailey, 1898, B. Sc., Columbus, 1323 Forsythe avenue.
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Hartwell, Arthur, 1888, M. E., Chicago, Ill., manager Chicago office Westinghouse E. & M. Co.
Hartwick, Louis M., 1897, M. E., Draftsman in Steel Works, Johnstown, Pa.
Harvey, Arlington Corylle, 1896, B. Ph., 1897, M. A., 1899, LL. B., Columbus, 145 King avenue.
Harvey, Emory Wayland, 1896, B. Ph., 11 East Sixteenth street, New York City, Milton Bradley Co.
Harvey, Florence Danford, 1898, B. Ph., Mt. Perry.
Harvey, Sherman Lee, 1896, G. Ph., Harrisburg, Druggist.
Harward, Arthur B., 1900, B. A., Columbus.
Hassler, Robert Hanich, 1892, M. E. in EE., electrical engineer, Indiana Bicycle Co., Indianapolis, Ind.
Hastings, Edwin George, 1898, B. Sc., Austinburg.
Hayes, Seth, 1892, B. Sc., Fremont, principal of High School.
Hayman, William C., 1900, M. E. in EE., Holgate.
Hayward, George E., 1893, C. E., New Philadelphia, surveyor of Tuscarawas county, Ohio.
Hazelton, Bird, 1898, B. Ph., New Straitsville.
Hazlett, Robert, Jr., 1887, C. E., Wheeling, W. Va., engineer for Ohio Company.
Heacock, William Preston, 1898, LL. B., Cardington.
Heath, Arthur T., 1887, G. Ph., Oak Harbor, analytic chemist, consulting engineer and contractor.
Hebble, Charles Roy, 1896, M. E. in EE., Cincinnati, electrical engineer.

Hedges, Harry, 1888, B. A.
Heller, Albert Henry, 1890, C. E., Youngstown, Youngstown Bridge Co.
Henderson, Adelbert Andrew, 1898, C. E., Columbus, City Engineer Corps.
Henretta, Charles Michael, 1896, E. M., Buffalo, engineer J. W. Ellsworth Coal Co.
Herbert, Charles T., 1897, LL. B., Columbia, South America.
Herms, Edith S., 1898, B. Ph., Portsmouth.
Herrick, Louise, 1893, B. A. (Mrs. Harry Abbott), Columbus, 1454 Highland St.
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Hertner, John H., 1899, M. E. in EE., Dayton.
Hess, Florence Louise, 1895, B. Ph., Columbus.
Hewitt, Strafford Reaves, 1898, M. E. in EE., Columbus Belting and Packing Co.
Hiatt, William Arthur, 1895, B. Ph., New York City, teacher in Stevens School, Hoboken, N. J.
Higbee, Charles E., 1883, B. Sc.
High, Odessa, 1896, B. A., West Jefferson.
Hill, Frank E., 1886, B. Sc., M. D., Muncie, Ind.
Hill, I. T. Reynolds, 1896, B. Sc. (H. & F.), Toledo, O., paymaster for Woolson Spice Co.
Hine, James S., 1893, B. Sc., Columbus, assistant professor of Entomology, State University.
Hine, Lucius A., 1888, E. M., 140 50th street, Chicago, Ill., President and Treasurer Hine-Watt Manufacturing Co.
Hipple, John Merton, 1898, M. E. in EE., Westinghouse E. & M. Co., Wilkinsburg, Pa.
Hirsch, Gustav, 1897, M. E. in EE., Columbus, engineer, Citizen's Telephone Co.
Hirst, Anna Brewster, B. A. (Antioch College), 1900, M. A., Yellow Springs.
Hoel, Sarah Elizabeth, 1893, B. Sc. (Mrs. W. M. Mills), North Tonawanda, N. Y.
Hoffman, Arthur Sullivant, 1897, B. A., Troy.
Hoffman, Hattie D., 1900, B. Ph., Columbus.
Homan, Frank, 1895, C. E., Cannelton, W. Va., Raven Coal and Coke Co.
Hood, Sherman, 1894, B. Sc., Meander, gardner.
Hoover, Frederic Roland, 1899, B. Ph., Columbus.
Hopkins, Charles Delnow, 1893, LL. B. (B. A., Ohio Wesleyan University), Athens.
Horton, Henry Pomeroy, 1889, B. Ph.
Hough, Benson Walker, 1899, LL. B., Delaware.
Houseman, Ruth U., 1897, B. Ph., Painesville, teacher in High School.
Houston, Anna Christine, 1892, B. Ph., 1895, M. A., Marysville.
Hovey, Clark Samuel, B. A. (Buchtell College), 1898, LL. B.,
Howald, Ferdinand, 1878, B. Sc., Rush Run, W. Va., manager of mining operations.
Howard, A. B., 1883, B. Ph., Jackson, Miss., clergyman.
Howard, Anna F., 1900, B. Ph., Columbus, 307 West Seventh avenue.
Howard, Curtis C., 1878, B. Sc., M. Sc., 115 Jefferson avenue, Columbus, professor of Chemistry in Starling Medical College.
Howard, Fanny Fern, 1896, B. A., Columbus.
Howard, Edward Davenport, 1894, LL. B., 1896, LL. M., Columbus, attorney.
Howard, John Wilmot, 1895, B. Sc., Columbus, assistant secretary, Board of Trade.
Howells, E. S., 1884, E. M., Massillon, Howells Mining Company.
Howells, Thomas J., 1897, E. M., Steubenville, O., Mingo Works National Steel Co., Mingo Junction, O.

Hubbard, Ralph Newton, 1891, B. Sc., Columbus, Columbus Machine Co.
Hughes, Raymond Mollyneaux, A. B. (Miami University), 1897, M. Sc., Miami University, professor of Chemistry.
Huddleson, Don Carlos, 1897, G. Ph., Columbus, assistant in Gymnasium, State University.
Huffman, Lillian Stuart, 1899, B. Ph., Columbus, 389 East Rich St.
Huggins, Burch Delaplaine, 1899 B. Ph., Hillsboro.
Hull, Mary Louise, 1894, B. A. (Mrs. C. H. Farber), Columbus, 392 West Seventh avenue.
Humphrey, J. Scott, 1879, B. Sc., Findlay, civil engineer.
Humphreys, Leona, 1895, B. A., Plain City, teacher in High School.
Hunt, William Franklin, 1887, M. E., attorney-at-law, New York Life Building, St. Paul, Minn.
Hunter, Madone C., 1900, M. E. in EE., Salt Creek.
Huntington, Arthur, 1899, M. E., Turtle Creek, Pa., Westinghouse Electric Manufacturing Co.
Huston, Charles H., 1897, LL. B. (B. S., Tri-State College, Ind.), Mansfield.
Hyde, Wilby Grimes, 1887, B. A. (LL. B., Cincinnati), Chillicothe, attorney-at-law
Hyle, Charles A., 1896, M. E. in EE., U. S. Weather Bureau, Mt. Tamalpais, California.

I

Imes, Marion, 1899, B. Sc. (Agr.), Durham, N. H., New Hampshire State College, student.
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J

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Jaynes, Allan B., 1900, Washington, D. C., Census Department.
Jeffrey, James Fred, 1900, B. Sc., Columbus.
Jeffrey, Maud Dorothy, 1895, B. Ph., assistant in library, State University.
Jenkins, William B., 1893, C. E., Bellefontaine, District Agent Interstate Savings Investment Co.
Jenkins, Willis H., 1894, C. E., Columbus, Transitman, P., C., C. & St. L. Ry.
Jennings, Irvin G., 1899, LL. B., Zanesville.
Jennings, Levi E., 1897, M. E. in EE., Indianapolis, Ind., Central Union Telephone Co.
Johnson, Charles W., 1896, M. E. in EE., Norwood, Cincinnati, chief draughtsman Bullock Electric Mfg. Co.
Johnson, Earle S., 1900,, M. E. in EE., Plants.
Johnson, George Edward, 1892, C. E., L. & N. R. R., Louisville, Ky.
Johnson, Herbert Lincoln R., 1892, M. E. in EE.
Johnston, Frederick Symmes, 1899, B. Sc. (Agr.), Durham, N. H., assistant professor of Agriculture, New Hampshire State College.
*Jones, A. A., 1886, C. E., died May, 1894.
Jones, Arthur James, 1898, M. E. in EE., Turtle Creek, Pa., Westinghouse Electric and Manufacturing Company.

Jones, Aaron Wesley, 1891, B. Sc., Columbus, Gardner I
Jones, Alexander Houston, 1895, M. E. in EE.
Jones, Benner, 1897, LL. B., Jackson.
Jones, Daniel D., 1893, G. Ph., Gallipolis, pharmacist, E
Jones, Jesse Lee, 1890, B. A., Philadelphia, Pa., chem
Sons, Ship Builders.
Jones, Paul, 1880, B. A., Columbus, attorney-at-law.
Jones, Pearl N., 1892, M. E. in EE., Pittsburg, Pa., e
Westinghouse E. & M. Co.
Jones, Richard Thomas, 1900, B. Ph., Columbus.
Jones, Smiley, 1894, E. M., Prescott, A. T.
Jones, William Francis, 1896, D. V. M., Cincinnati, Mian
Judd, Horace, 1897, M. E., 1899, M. Sc., Brooklyn, N
Institute.
Judkins, Clyde H., 1897, LL. B. (A. B., Scio College), Fl
Junk, Harry Prior, 1895, LL. B., Columbus, attorney-at-

K

Kanmacher, Samuel H., 1900, M. E. in EE., Columbus,
Gold Mining and Milling Company.
Karshner, George M., 1900., B. A., Columbus, student, C
Keagle, Anna Brown, 1895, B. Ph., Columbus, teacher
West Fourth avenue.
Keating, David Thatcher, 1899, B. Ph., Columbus, 1317
Keffler, Frederick, 1892, M. E., Anaconda, British Colu
the British Columbia Copper Co., Ltd.
Keifer, William White, 1886, B. A. (LL. B., Cincinnati),
at-law.
Keiser, Romeo Orpheus, 1892, B. Sc., 1896, G. Ph., '98,
M. D., Cleveland Homeopathic Medical College, ph
Kellerman, Ivy, 1898, B. A., 1899, M. A. (Cornell Univ
student, Cornell University.
Kellicott, William E., 1898, B. Ph., Columbia University
Kellison, Edward Lafayette, 1897, B. Ph., 1900, LL. B.,
Kemmler, Edward A., 1888, C. E., 895 S. High street, C
engineer.
Kerr, Samuel Thompson, 1894, M. E. in EE., Martins
Municipal Electric Light Plant.
Kersey, William Rufus, 1899, M. A. (B. A., Earlham C
East Town street.
Kershaw, Francis Stewart, 1891, B. Ph., Boston, Mass.
Kershaw, Samuel Charles, 1892, B. Ph., Columbus, b
Bolt Works.
Kester, Fred. Edward, 1895, M. E. in EE., Columbus, as
State University.
Kiesewetter, Louis Frank, 1891, C. E. (A. B., Harvard,
Columbus, Cashier Ohio National Bank.
Kiler, Abdel William, 1896, G. Ph., druggist, Columl
streets.
Kinder, Gordon D., 1900, B. Ph., Ottawa.
Kimberley, Charles H., 1900, B. Sc., Pharmacy, Colu
King, Robert James, 1899, B. A., Zanesville.
Kirby, Harriet R., 1898, B. A., Columbus, teacher in N

Kirker, Harry L., 1889, B. Sc., with the Westinghouse Company, Sodelee Boite 56, Havre, France.
Kiser, Katherine Daniel, 1895, B. A., Columbus, teacher in High School.
Klein, David, 1900, B. Ph., Columbus.
Kline, Charles H., 1897, M. E. in EE., Dayton, city engineer and deputy county surveyor.
Knauss, William Henry, 1895, B. Sc., student, Starling Medical College, 1317 Dennison avenue.
Knecht, Arthur Edward, 1898, M. E., Akron, Stirling Company, Barberton, O.
Knight, Caroline E., 1900, B. Ph., Columbus.
Knight, Ruby Ray, 1895, B. Sc., Middleport.
Knight, William A., 1900, M. E., Columbus, instructor in shopwork, State University.
Knopf, Eva S., 1895, B. Ph., Columbus, teacher in North High School.
Knopf, George W., 1883, B. Sc., Pittsburg, Pa., bridge builder.
Knox, Frank Stewart, 1900, E. M., Columbus.
Kohr, Donald Alexis, 1898, B. Ph., Westerville.
Krauss, Bertha Katherine, 1892, B. Ph., Ottawa.
Kreiger, Charles Henry, 1887, G. Ph., Columbus, superintendent the Kauffman-Lattimer Co.
Krumm, Charles S. M., 1896, B. Ph., 1898, LL. B., Columbus, attorney, 277 South Eighteenth street.
Krumm, Herbert Zettler, 1898, B. Ph., Columbus, 975 South High street.
Krumm, Lillian Louise, 1895, B. Ph. (Mrs. Harry Rush Wilson), Columbus, 1459 Bryden Road.
Krumm, Louis Ralph, 1898, M. E. in EE., Engineering Department Central Union Telephone Co., Chicago, Ill.
Krupp, William Emil, 1899, LL. B., Urichsville.
Kuhn, Valley Howard, 1896, M. E. in EE., Etna.
Kuhn, Harry Waldo, 1897, B. Sc., graduate student, Cornell University.

L

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Lamme, Benjamin G., 1888, M. E., Pittsburg, Pa., engineer, Westinghouse E. & M. Co
Lamme, Bertha A., 1893, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.
Landacre, Francis Leroy, 1895, B. A., assistant professor of Zoology and Entomology, State University.
Landacre, Walter Alexander, 1891, G. Ph., Columbus, assistant professor of pharmacy.
Landis, Walter Victor Titus, 1895, B. Ph., Dayton.
Lane, Quinton R., 1898, B. Ph., 1900, LL. B., Attorney, Columbus.
Large, Joseph H., 1890, C. E., Whigville, O.
Laughlin, Hugh Clarence, 1890, B. A. (A. M., 1895, University of Nebraska), 1712 Bathgate avenue, New York, teacher in High School for Boys and Girls.
Lavery, William F., 1890, D. V. M., veterinary surgeon, State University.
Lawrence, Arthur K., 1897, G. Ph., Columbus, 69 North Seventeenth street, Pharmacist.
Layton, Roy Everett, 1895, B. A., 1897, LL. B., Wapakoneta, attorney.
Lee, Corless E., 1900, M. E. in EE., Speidel.
Lee, Edwin S., 1893, G. Ph., Columbus, druggist, 144 West Ninth avenue.
Lee, Robert M., 1897, M. E., Columbus.

Leffler, Edward Victor, 1896, G. Ph., Leipsic.
Lehman, John Wesley, 1899, B. Ph., Canal Winchester.
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Lentz, Alice B., 1897, B. Ph., Lloydsville.
Lentz, Theresa, 1893, B. Ph., Bellaire, teacher in High School.
Leonard, James Lincoln, 1893, LL. B. (B. S., Ohio Normal University), Welcome.
Levering, Orpheus D., 1893, M. E.
Lewis, Charles Montgomery, 1881, B. A., Columbus, with Columbus Evening Dispatch.
Lewis, Thomas K., 1894, B. Sc., Columbus, assistant in drawing State University.
Lincoln, Paul Martyn, 1892, M. E. in EE., Niagara, N. Y., assistant superintendent Niagara Falls Power Co.
Lindo, William C., 1896, C. E., Port Antonio, Jamaica, W. I., civil engineer.
Linebaugh, Jesse J., 1899, M. E. in EE., Schenectady, N. Y., General Electric Co.
Linson, Irvin, 1882, B. A.
Linville, Clarence P., 1900, B. Sc., Chemistry, Columbus, Fellow in Chemistry.
Lisle, Charles H., 1900, B. Ph., Pataskala.
Lisle, Dallas Gypsi, 1899, B. Ph., Ashland, Ky.
Lisle, Leslie Mae, 1899, B. Ph., Columbus.
Logan, Lavallette Lasea, 1896, E. M., Scranton, Pa., professor mine surveying, National Correspondence School.
Logsdon, Carey Lignori, 1899, B. Ph., Columbus.
Logsdon, Clement Jay, 1898, G. Ph., Newark, with Dr. J. H. Beatty.
Loomis, John Cooper, 1898, LL. B., Tiffin.
Lott, Charles Milford, 1895, M. E. in EE., Paulding, Supt. Electric Light Plant.
Loveberry, Clarence, 1896, D. V. M.
Lovejoy, Ellis, 1885, E. M., Union Furnace, chemist and superintendent Columbus Brick and Terra Cotta Co.
Lovejoy, Jesse R., 1884, B. Sc., Schenectady, N. Y., with General Electric Light Co.
Luce, George Ernest, 1897, LL. B. (A. B., Ohio Wesleyan University), Columbus, 95 Hamilton avenue.
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Lusk, William Vinton, 1893, D. V. M., Ft. Wingate, New Mexico, veterinary surgeon, Ind. cavalry.
Lydenberg, Walter B., 1898, B. A., Dayton.
Lynas, Caroline, 1898, B. A., Columbus, 109 West Gay street.
Lynas, Charles E., 1898, B. A., Columbus, 109 West Gay street
Lyon, Arthur H., 1900, M. E., Wauseon.

M

Maag, Benjamin Franklin, 1899, M. Sc. (B. Ph., Wooster University), Mt. Eaton.
MacGuire, Charles White, 1895, G. Ph., '97, M. D., Toledo Medical College, Toledo, Ohio.
Machwart, Washington J., B. Sc. (Muskingum College), 1900, M. A., Mt. Eaton.
Mackey, Ure LaVerne, 1893, M. E. in EE. (B. A., Wooster University).
Magly, Robert A., 1897, G. Ph., 1896, LL. M., chemist, Bessie Iron Furance, O.
Magruder, Leonard Anthony, 1895, B. Ph., 1896, LL. M.

Maier, John Valentine, 1895, LL. B. (B. S., Northern Indiana Normal University).
Malone, William Ruskin, 1885, B. A., Toledo, with New York Life Insurance Co.
Manecke, Gilbert, 1897, LL. B., Fostoria.
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Mann, Wilber Edwin, 1899, B. Ph., 1900, M. A., Columbus.
Marple, Charles Allen, 1885, B. Sc., Louisville, Ky., teacher of Science, Male High School.
Marquard, Frank Fred, B. L., 1896, C. E., Sharon, Pa., chemist, National Co.
Marshall, George Sidney, 1894, B. Ph., 1897, LL. B., Columbus, attorney, Second Assistant Director of Law, 1566 Neil avenue.
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Martin, George, 1897, M. E. in EE., Massillon, Central Union Telephone Co.
Martin, Percy, 1892, M. E. in EE., Milan, Italy, Mediterranean Electric Co.
Marvin, Charles Frederick, 1883, M. E., Washington, D. C., U. S. Weather Bureau.
Mason, George F., 1890, G. Ph., Milwaukee, Wis., student of medicine, Milwaukee Medical College.
Masters, George Albert, 1886, C. E., Chicago, Ill., Western Library Association.
Mathers, John Harrison, 1895, B. Ph., Conover.
Mathias, Frederick W., 1893, B. Sc., Toledo, teacher High School.
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Matson, William Edgar, 1896, M. E. in EE., Lynn, Mass., with General Electric Co.
Mauer, George Clifford, 1892, D. V. M., Oak Harbor, veterinarian.
Mays, James Wesley, 1897, B. Ph., Columbus, student in College of Law, State University.
McAllen, William Johnson, 1894, C. E., engineer, Chicago, Ill., Illinois Steel Co.
McCall, Arthur Gillett, 1900, B. Sc. (Agr.), McGaw.
McCallum, Raymond, 1900, B. Ph., Dayton.
McCarter, Edward Bancroft, 1892, B. A., 1894, LL. B., Columbus, attorney, 737 Bryden Road.
McCarter, Flora, 1897, B. A., Columbus.
McCarter, Robert Dale, Jr., 1895, M. E. in EE., London, England, representing General Electric Co.
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McClelland, Chalmer Kirk, 1898, B. Sc. (Agr.), Andover.
McClure, Robert E., 1900, LL. B., Dayton.
McCormick, J. H., 1880, M. E., Dayton, National Cash Register Co.
McCormick, William Francis, 1896, M. E., Columbus, Cleveland avenue.
McCulloch, George Elmer, 1891, B. Sc.
McDowell, John Andrew, 1882, B. Sc., 949 Neil avenue, Columbus, cement engineer.
McFadden, John Franklin, 1878, B. A., Columbus, attorney-at-law, 92 North Twenty-first street.
McGregor, James Howard, 1894, B. Sc., New York, assistant in Zoology, Columbia University.
McGrew, John Alexander, 1895, C. E., M. of W., Pennsylvania Railroad Co., Logansport, Ind.

McGuffey, Francis Hoyt, 1894, M. E. in EE., New Lexington, O., U. S. Telephone Co.

McIntire, Alfred Heber, 1898, M. E. in EE., 1900, M. E., Schenectady, N. Y., General Electric Co.

McLaughlin, Annis, 1897, B. Ph., Columbus.

McLaughlin, James Audley, 1895, LL. B. (B. A., Monmouth College).

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McPherson, William, 1887, B. Sc., 1891, M. Sc., 1895, D. Sc., 1899, Ph. D., University of Chicago, Columbus, State University, professor of Chemistry.

Mead, Clinton V., 1884, B. Ph., Denver, Col., attorney-at-law.

Mead, Rollo Nooman, 1895, D. V. M., Grand Rapids.

Mebs, George H., 1897, G. Ph., Columbus, Pharmacist, Columbus State Hospital.

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Meek, Edward Duncan, 1896, B. A., 1899, M. A. Glencoe.

Meek, William W., 1899, B. Ph., 121 Fifteenth avenue, Columbus, J. W. Meek & Co.

Mendenhall, Maurice H., 1893, D. V. M., West Elkton.

Menough, Arthur George, 1894, E. M., Apartado 17, Zacatecas, Mexico, assayer and chemist

Mercer, Frank Emmet, 1896, M. E. in EE., Lima, Ohio.

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Merrill, Charles Wesley, A. B. (Denison University), 1898, LL. B., 326-330 The Nasby, Toledo, attorney.

Mershon, Ralph D., 1890, M. E., New York office Westinghouse E. & M. Co.

Mesloh, Charles W., 1889, B. A., 1895, M. A., assistant professor of German, State University.

*Metters, Allen, 1896, B. A., died January 22, 1898.

Metzger, Edward H., 1897, G. Ph., Columbus, assistant pharmacist, State Epileptic Hospital.

Mickey, Blanche D., 1898, B. Ph., Shelby, teacher.

Middleswart, Clarence Coulter, A. B. (Marietta College), 1898, LL. B., Constitution.

Middleton, Ambrose, 1895, G. Ph., Malta, pharmacist.

Miller, Carl James, 1898, B. Sc. (Agr.), Franklin.

Miller, Charles C., 1883, B. A., Lima, superintendent schools.

Miller, Daniel Elmer, 1890, G. Ph., Dayton, druggist.

Miller, Frank Case, 1893, C. E., Dwight, Ill., Supervisor, Chicago and Alton R. R.

Miller, Gretchen P., 1900, B. Ph., Columbus.

Miller, Harry Franklin, 1889, M. E., South Bethlehem, Pa.

Miller, Henry P., 1897, D. V. M. Sunbury.

Miller, Merritt Finley, 1900, B. Sc. (Agr.) Ridpath.

Miller, Walter McNab, B. Sc., 1885, Reno, Nev., professor of Anatomy and Physiology, State University.

*Milligan, James Porter, 1886, B. A., died, February, 1899.

Mills, William C., 1898, B. Sc. (H. & F.), Columbus, curator Archæological collection, State University.

Milne, Alexander, B. D. (Yale University), 1898, M. A., Duluth, Minn., pastor Pilgrim Congregational Church.

Mix, Edward W., 1888, B. Sc., Paris, France, superintendent "Le Societi des Establishments."

Mix, Melvin Noble, 1895, B. Ph., New York, The World, journalist.
Mock, George Herbert, 1891, B. Sc., Ohio State Savings Bank, Columbus.
Montgomery, Howard, 1896, B. Ph.
Moodie, Alice Haynes, 1890, B. A., Mrs. Arthur Hartwell, Chicago, Ill.
Moon, Victor C., 1900, B. Ph., Columbus.
Mooney, Charles Napoleon, 1900, B. Sc. (Agr.) Milan.
Mooney, Daniel Francis, 1894, LL. B., St. Mary's.
Moore, Edgar Howard, 1900, B. Sc., Columbus.
Moore, Henry Curtis, 1897, B. Sc., Washington C. H.
Moore, Virgil Owen, 1895, B. Sc., M. D., Toledo, 710 Starr ave., physician.
Morhart, Katherine Elizabeth, 1893, B. Ph., Pomeroy.
Morrey, Annie Eliza, 1896, B. A., Chester Hill.
Morrey, Charles B., 1890, B. A., 1896, M. D., Columbus, assistant professor Physiology, State University.
Morrey, William T., 1888, B. A.
Morris, Ingle H., 1900, LL. B., Columbus.
Morris, Clyde T., 1898, C. E., Youngstown, Youngstown Bridge Co.
Morrison, M. Frank, 1879, B. A., Mrs. S. H. Short, London, England.
Morrison, Robt. O., 1893, C. E., assistant on engineer corps, Erie and Ashtabula division of Pennsylvania Lines west of Pittsburg.
Morrow, Charles James, 1900, D. V. M., Tiro.
Morton, George L., 1884, M. E. (LL. B., National Law School), chief examiner, patent office, Washington, D. C.
Moses, Martha Allston, 1891, B. Ph., 1111 Hinman ave., Evanston, Ill., bookkeeper.
Moss, Blanche, 1898, B. A., Columbus.
Moss, William, 1898, G. Ph., Cambridge, O., Pharmacist.
Moyer, Henry E., 1893, B. Sc., Youngstown, chemist, Youngstown Steel Co.
Mull, Bert LaForrest, 1898, LL. B., Columbus, 114 Herman street.
Mullay, Annie, 1887, B. Ph., Chicago, teacher.
Mundhenk, Fred., 1896, B. Ph., Columbus, life insurance agent, 233 North Eleventh avenue.
Mundhenk, Herbert C., 1889, B. Ph., Brookville.
Mundhenk, Ruth, 1899, B. Ph., Dayton.
Munn, Mortimer Adam, 1894, C. E., Cleveland, Cleveland & Eastern Ry. Co.
Munson, Theodore, 1898, B. Sc., Zanesville.
Murray, Claude R., 1895, B. A., Middleport, principal of High School.
Murray, Frank Erskine, 1892, D. V. M., Greenfield, veterinary surgeon.
Myers, Albert B., 1900, E. M., Columbus.
Myers, Joseph Simmons, 1887, B. A., Pittsburg, editor Pittsburg Post.
Myers, Ord, 1895, M. E. in EE., inspector Metropolitan St. Ry. Co., New York.
Myers, Roy V., 1893, C. E., Dayton, Tenn., Dayton Coal and Iron Co., Ltd.
Myers, Uriah H., 1887, E. M., Pittsburg, Pa., Myers, Shinkle & Co.

N

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Needham, Harry J., 1900, M. E., Columbus.
Needles, Mana R., 1890, B. Ph. (Mrs. Kilpatrick), Owosso, Mich.
Nettleton, Arthur Warren, 1898, B. Sc. (Agr.), Medina.
Newton, Henry S., 1889, B. Sc., Syracuse, N. Y., general manager Syracuse, Lakeside and Baldwinsville Ry.
Newton, Samuel Donald, 1895, C. E., engineer on Southern R. R., Knoxville, Tenn.

Nichol, Gertrude Belle, 1899, B. Ph., Columbus.
Nicholson, Charles M., 1900, M. E. in EE., Columbus.
Nicola, Benjamin Di, 1900, LL. B., Barnhill.
Niewvahner, John Henry, 1891, B. A., Jackson, assistar
Bank.
Noble, W. F., 1879, B. A., Tiffin, attorney-at-law.
Nold, John H., 1900, E. M., Columbus.
Nurian, Kerson, 1899, M. E., Turtle Creek, Pa., West
Nutt, Arthur Chase, 1897, B. Ph., Worcester, Mass., i
German, Worcester Polytechnic Institute.

O

Obetz, Francis Henry, 1896, G. Ph., '99, M. D., St
Columbus, physician.
O'Brine, David, 1881, B. Sc., M. Sc., E. M., D. Sc., M.
Odebrecht, August, 1895, G. Ph., Columbus, with H.
O'Kane, Sarah Eliza, 1891, B. Ph. (Mrs. F. M. Raymon
Columbus.
O'Kane, Walter Collins, 1897, B. O., Troy, journalist.
Orton, Clara Gregory, 1897, B. Ph., Columbus, 100 Nc
Orton, Edward Jr., 1894, E. M., Columbus, director of
working and Ceramics, State University.
Orton, Walter Edwin, 1899, LL. B., Williamstown, Ma
Osborn, Abner A., 1900, B. Sc., Columbus.
Osborn, Samuel Galloway, 1897, LL. B., Columbus,
street.
Osborn, Raymond Carroll, 1898, B. Sc., 1900, M. Sc.,
Ozias, Albert N., 1889, M. Sc., Principal High School,

P

Pabodie, Robert Jewett, 1899, M. E., Watertown, N
Engine Company.
Page, William Herbert, 1892, LL. B., 1894, LL. M. (I
professor of Elementary Law, State University.
Palmer, Walter K., 1893, M. E., State University, La
professor, Department of Mechanical Engineering, U
Parker, John Bernard, 1898, B. A., 1900, M. A., Dan
Parmenter, William W., 1900, B. A., Mt. Vernon.
Patch, Homer Austin, 1896, C. E., Minneapolis, Min
Herzog Manufacturing Co.
Patchell, Owen P., 1889, B. Ph., Paul's Valley, Indian
Patchin, Rufus Harry, 1898, LL. B., Chardon, attorney
Payne, Halbert Edwin, 1887, M. E., 256 Broadway, N
Typewriter Co.
Peal, Allen Saunders, 1895, B. A., Chicago, Ill.
Pearce, George Downer, 1892, G. Ph., Pharmacist, Sou
Pearl, Allen Sexton, 1894, M. E. in EE., Columbus, O
tral Electric Company.
Pease, Edward Livingstone, 1895, B. A., 1899, LL. B.
avenue.
Pedlow, Edward Benjamin, 1893, C. E., New Straitsville
bus and Hocking Coal and Iron Co.

Peppel, Samuel Vernon, 1899, B. Sc. (Chem.), Madison, Wis., Wisconsin Geological Survey, assistant in Ceramics, State University, Columbus.
Pence, David Arrel 1894, M. E., Lowellville.
Perkins, Earl Harley, 1893, LL. B., Wellington.
Peters, William Lincoln, 1885, M. E., Riverside, Cal., merchant.
Pfarr, Philip Lewis, 1896, B. Sc. (Agr.), Dennison, Iowa.
Phelps, Cyrus Alba, 1892, B. Sc., Sombereto, Jacataccas, Mexico, with Sombereto Mining and Milling Co.
Pierce, John Mattison, 1895, M. E. in EE., South Charleston.
Pilcher, Hastings Moore, 1895, M. E. in EE., Athens, telegraph operator and billing clerk.
Pitts, Grace Lenore, 1900, B. Ph., Columbus, graduate student, State University.
Plantz, Wyatt Garfield, 1894, B. A., Pomeroy.
Pleukharp, Chas. V., 1885, M. E., Lacanada, California.
Plimmer, Gertrude Alice, 1896, B. Ph., Columbus, 1188 Oak street.
Polk, Walter C., 1895, C. E., Indianapolis, Ind., assistant general foreman, Central Union Telephone Co.
Pomerene, Frank Etherington, 1891, B. Ph., 1895, LL. B., Coshocton, attorney-at-law.
Pool, Harwood Redington, 1881, B. Ph., LL. B., 62 Cedar street, New York City.
Porter, Mary Baxter, 1897, B. Ph.
Postle, Herman R., 1894, C. E., Joplin, Mo., civil engineer.
Postle, Kenneth F., 1894, B. A., Lancaster, Ky., teacher.
Powell, Chas. S., 1893, M. E. in EE., Cleveland, representing Westinghouse E. & M. Co.
Powell, Edward Thompson, 1896, LL. B., Columbus, attorney, 518 East Broad street.
Powell, Norman Clemson, 1895, D. V. M., Damascus.
Prall, Anna Dickson, 1898, B. A., Columbus.
Pratt, Fred K., 1900, C. E., New Philadelphia.
Price, Homer Charles, 1897, B. Sc. (Agr.), assistant horticulturist, O. S. U.
Priest, Frederick, 1895, D. V. M., Newark, veterinary surgeon.
Pryor, Charles Foster, 1898, LL. B., Columbus.
Pugh, Lawrence Randolph Whetzel, 1893, B. Ph., 1895, LL. B., Columbus, attorney-at- law, 13 Board of Trade.
Pulling, Margaret G., 1900, B. Ph., Columbus.
Pumphrey, John Homer, 1898, B. Sc., Clayton.
Putnam, Abbey Slocum, 1897, B. Ph., Fisher, Ill.

R

Radcliff, Charles Anson, 1895, B. Ph., attorney, Jackson.
Randall, Emilius Oviatt, 1892, LL. M. (B. Ph., Cornell University), Columbus, attorney-at-lew, professor in Law School, State University.
Randolph, Edward S., 1897, LL. B. (A. B., Ohio Wesleyan University), Somerset.
Rane, Frank William, 1891, B. Agr. (1892, M. Sc., Cornell), Durham, N. H., professor of Horticulture, New Hampshire College.
Rarick, Murray M., 1896, B. Sc. (Agr.), Jacksontown, physician.
Rasor, Samuel Eugene, 1898, B. Sc., College Springs, Iowa, Professor of Mathematics, Amity College.
Rawson, Levi, 1899, C. E., Sistersville, W. Va., Carter Oil Co.
Ray, Frank A., 1887, E. M., Columbus, professor of mine engineering, State University.

Ray, William M., 1893, C. E., room 825, Hickox Building, Cleveland, C. L. & W. R. R.
Raymond, Coles Abel, 1894, C. E., Wauseon, bridge draughtsman.
Raymond, Frank M., 1888, B. A., Columbus, attorney-at-law, 215 West Tenth avenue.
Raymond, Maud, 1899, B. Ph., Columbus, 558 Rich St.
Redick, Mary Glisson, 1898, B. Ph., Findlay.
Redrow, Walter L., 1900, B. Sc., Columbus.
Reed, Robert Browning, 1896, M. E. in EE., Zanesville, electrical contractor.
Reed, William Allen, 1897, E. M., Querida, Colorado, assayer and surveyor, Bassick G. M. Co.
Reese, William Daniel, 1891, B. A.
Reese, William Henry, 1896, G. Ph., Glen Roy, Pharmacist.
Reeves, Archibald C., 1887, C. E., 153 Superior avenue, Dayton, civil engineer.
Resler, Edwin D. (B. A., Otterbein), 1897, M. A. Westerville.
Rice, Herbert A., 1897, C. E., Jackson, teacher.
Rice, Mabel Elise, 1898, B. A., Columbus, student, Hubbard avenue.
Rice, Mary Washington, 1900, B. A., Columbus, Fellow in Economics, Ohio State University.
Rice, Susan Esther, 1899, B. A., Columbus, 111 West Fifth avenue.
Richardson, Hamilton Hutchinson, 1892, B. Agr., Brooklyn, gardner.
Richardson, William Waddle, 1899, B. Ph., Washington, D. C.
Richey, Luzerne A., 1897, B. Ph., Denver, Col., attorney.
Rickey, Alla B., 1889, B. Ph. (Mrs. Geo. H. Cless), Broad street, Columbus.
Rickey, Tallmadge A., 1900, B. Ph., Columbus.
Riddle, Howard Sterling, 1897, M. E. in EE., Akron, Diamond Rubber Co.
Riddle, Lumina C., 1897, B. Sc., 1898, M. Sc., Grand Haven, Mich., teacher in Science and Mathematics in the Akeley Institute.
Rietz, Henry Lewis, 1899, B. Ph., Gilmore.
Riggs, Ernest Jacob, 1895, B. Sc. (Agr.), M. Sc. (H. & F.), Raccoon Island, O.
Rightmire, George Washington, 1895, B. Ph., 1898, M. A., Columbus, teacher in High School and fellow and assistant in American History, State University.
Ritchey, Joseph C., 1890, B. Sc., Mingo Junction, with Junction Iron and Steel Co..
Roach, Simeon Andrew, 1899, B. Ph., Cleveland, New York Life Insurance Co.
Robbins, George A., 1899, B. Ph., Columbus, Lexington avenue.
Roberts, Cyrus Swan, 1898, E. M., San Lui Potosi, Mexico, with the Cia Metaturica Mexicana.
Robinson, Eckla Mazola, 1892, B. Sc. (Mrs. George Rowe).
Robinson, Erdis Geroska, 1893, C. E., Mexico, D. F., Mexico, Engineering Department of Mexican Central Railway.
Robinson, Zella Vina, 1898, B. Ph., 1900, M. A., Columbus, Highland street.
Rockwell, Mary Fannie, 1899, B. Ph., Columbus.
Roebuck, Carl Fletcher, 1900, B. Ph., Columbus, student State University Law College.
Rogers, Andrews, 1896, B. Ph., New York City, student, College of Physicians and Surgeons.
Rogers, Frank Persons, 1899, B. A., Columbus, 140 Warren street.
Rogers, James Bertrand, 1896, E. M., Steubenville, National Steel Co., Mingo Junction.
Root, Willis J., 1885, E. M., Columbus, chemist, National Steel Co.
Rowlee, Henry A., 1897, M. E., Columbus, inspector Ordnance Department U. S. A., The Rarig Eng. Co.

Ruhlen, Carl Marble, 1898, M. E., Honolulu, H. I., assistant inspector construction department, U. S. Army.
Ruhlen, Frank, 1896, B. Sc. (Agr.), Columbus, assistant in Agriculture, State University.
Rule, Ralph R., 1897, LL. B. (B. S., Tri-State College, Ind.), Greenspring.
Ruppersburg, Emma Anna, 1891, B. Sc., 1896, M. Sc., Columbus, teacher in High School, 842 South High street
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Safford, Robert Edwin, 1894, B. Sc., New York City, Mexican Metallurgico Co.
Sandoe, Lydora Olivia, 1893, LL. B., Mrs. Bachman, 1425 Bryden Road, Columbus.
Sater, Lowry Francis, 1895, B. Ph., 1897, LL. B., Columbus, attorney, 114 Buttles avenue.
Sayre, Charles B., 1900, B. A., Columbus.
Schaff, Mae B., 1900, B. Ph., Columbus.
Schaub, Edward Louis Tascher, 1885, M. E., Columbus, assistant superintendent Associated Charities.
Schaub, Charles E., 1897, E. M., Phillippi, W. Va.
Scheibell, William O., 1888, E. M., Columbus, secretary and general manager, The American Art Tile Co.
Schlesinger, Hugo Nathan, 1899, LL. B., Xenia.
Schreiber, George E., 1900, M. E. in EE., Ironton.
Schreiber, John Martin, 1899, M. E. in EE., Cleveland, Cleveland Electric Street Railway.
Schroll, Otto, 1886, C. E., Wheeling, W. Va., civil engineer, M. of W., W. B. & T. Ry. Co.
Schueller, Erwin Waldemar, 1892, B. A., M. D., 1894, Columbus, physician, 439 South High street.
Schwier, Minona, 1897, B. A., Columbus, 212 East Mound street.
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Scott, Bertha, 1890, B. Ph., Indianola Place, Columbus.
Scott, Herbert, 1893, B. Sc., Columbus, pastor North M. E. Church, 2533 East avenue.
Scott, Charles Felton, 1885, B. A., Pittsburg, Pa., chief electrician Westinghouse E. & M. C., 6214 Sellers street.
Scott, Daisy Medill, 1887, B. A., Columbus, teacher in High School.
Scott, Dudley, 1900, B. Ph., Columbus.
Scott, Emma, 1888, B. Sc., Brindiban, India Missionary.
Scott, Ernest, 1897, B. Sc. (Agr.), Columbus, student, Ohio Medical University, 131 East Fifteenth avenue.
Scott, Mary Odella, 1885, B. A., Columbus, teacher in High School, 87 West Fourth avenue.
Scott, Mary Mermon, 1887, B. A., 1274 Summit street, Columbus.
Scott, Mary Bole, 1896, B. A., Columbus, teacher, 926 Oak street.
Sears, Walter James, 1894, B. Ph., Chillicothe, with Sears and Nichols Co.
Sedgwick, Edward Crayton, 1895, M. E. in EE., Columbus, Case Mfg. Co.

Selby, Augustine D., 1893, B. Sc., Wooster, botanist and chemist, Ohio Experiment Station.
Sellenings, Albert Eugene, 1896, B. Ph., M. D., Bellevue Interne, New York.
Seney, Allen J. (B. Ph., University of Michigan), 1899, LL. B., North Baltimore.
Serva, Adam A., 1893, M. E. in EE., Ft. Wayne, Ind., Fort Wayne Electric Works.
Seymour, Raymond J., 1900, B. Sc., Fellow in Natural History, Tuft's College.
Shark, Robert J., 1897, LL. B., Hamilton.
Sharp, Charles C., 1888, C. E., Corning, superintendent Mining Department Sunday Creek Coal Co.
Sharp, David Barton, 1893, LL. B., Columbus, 335 West Fourth avenue.
Shellabarger, Marley Rolin, 1897, B. Sc. (Agr.), Garland, Ohio.
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Shepherd, Charles W., 1900, C. E., Huron.
Sherman, Christopher Elias, 1894, C. E., Columbus, assistant professor in Civil Engineering, State University.
Shield, Wallace B., 1898, B. A., Kansas City, Mo., Manual Training High School.
Short, Sidney H., 1880, B. Sc., London, England.
Shuck, Carey Lucas, 1898, B. Ph., Columbus, "Columbus Evening Dispatch."
Shurtz, Olive L., 1898, B. Ph., Columbus, 26 King avenue.
Siebert, Wilbur H., 1888, B. A. (M. A., Harvard), Columbus, associate professor History, State University.
Sigerfoos, Charles Peter, 1889, B. Sc., 1897, Ph. D. (Johns Hopkins University), Minneapolis, Minn., professor of Zoology, University of Minnesota.
Sigerfoos, Edward, 1891, B. Ph., Fort Sheridan, 1st Lieut. Fifth Infantry, U. S. Army.
Simonton, Mark, 1895, M. E. in EE., Columbus, Electric Supply and Construction Co.
Simpson, Abigail Ellen, 1895, B. A., London, teacher in High School.
Singleton, Charles Tod, 1900, B. Ph., student State University Law College.
Sinks, Frederick Nicholas, Ph. L. (Yale University), 1898, LL. B., Columbus, 714 East Broad street.
Skinner, Chas. E., 1890, M. E., box 435, Pittsburg, Pa., Westinghouse E. & M. Co.
Slater, Burr Homer, 1895, G. Ph., Chesterville, Pharmacist.
Slyh, Emma Almeida, 1892, B. Sc., Marble Cliff.
Smith, Albertine, 1900, B. Ph., Columbus.
Smith, Alice May, 1897, B. Ph.
Smith, Burton Griffin, 1895, G. Ph., Detroit, Mich., chemist for the Ray Chemical Co.
Smith, Carl Clyde, 1890, B. Ph., Marietta.
Smith, Clarence Elmer, 1898, G. Ph., Columbus, student O. M. U.
Smith, David William, 1899, C. E., Columbus, Hocking Valley Ry. Co.
Smith, Edward E., 1897, G. Ph., Indian Territory.
Smith, Edward Trevett, 1898, LL. B., Holden, Mo.
Smith, Florizel, 1880, B. A., Spahr Building, Columbus, attorney-at-law, 970 Bryden Road.
Smith, Horace Prescott, 1886, B. Sc.
Smith, Maud Virginia, 1894, B. A. (Mrs. Thomas Chalmers), Port Huron, Mich.
Smith, Myron Alphonso, 1892, B. Ph., Columbus, with Keyes & Thomas, real estate agents.
Smith, Nathaniel B., 1893, D. V. M.
Smith, Philo Christopher, 1885, B. Sc., Middlebranch, farmer.
Smith, Virginia Roletta, 1900, B. Ph., Columbus.

Smith, Warren Lee, 1899, LL. B., Columbus, 29 East Dodridge street.
Snider, Charles M., 1897, B. Sc. (Ind. Arts), Columbus, 162 West Mound St.
Snider, Jesse Worthington, 1893, LL. B., LL. M., Columbus, 340 Denmead ave.
Snively, Harry H., 1895, B. A., Columbus, teacher in High School, 1332 Highland street.
Snow, Walter A., 1897, B. Ph., Park Place, Minneapolis, Minn., Pastor Congregational Church.
*Snyder, Henry, 1879, B. Sc., 1892, M. Sc. Died September, 1898.
Snyder, James Edward, 1892, LL. B. (B. A., Wooster University).
Snyder, Walter S., 1897, LL. B., Columbus, Attorney, 69 North Fourth street.
Somermeir, Edward Everett, 1898, G. Ph., Columbus, assistant in Mining and Metallurgy, State University.
Southard, Eustace Elden, 1895, G. Ph., Columbus, pharmacist, 470 Oak street.
Southard, Thomas Campbell, 1896, B. A., Columbus, 470 Oak street.
Sparks, Edwin Earle, 1884, B. A., 1892, M. A., Chicago University, assistant professor, Chicago, Ill.
Spencer, William Henry, 1891, G. Ph., Sandusky, with Strong and Spencer.
Spencer, Ralph Oliver, 1899, B. A., Columbus.
Sperr, Frederick W., 1883, E. M., Houghton, Mich., professor of Civil and Mining Engineering, Michigan School of Mines.
Sprague, Charles Franklin, 1896, B. A., 1899, LL. B., Wapakoneta.
Sprague, Clarence Milton, 1899, C. E., Columbus, Room 2, Union Station, Assistant on Engineers' Corps, P., C., C. & St. L., Indianapolis Div.
Sprague, William Ralph, 1899, B. Ph., Columbus, 71 West Tenth avenue
Spurrier, John Randolph, 1896, M. E. in EE., Wilkinsburg, Pa., Westinghouse E. & M. Co.
Staley, Marcellus, 1899, M. E. in EE., U. S. Transport Meade, chief electrician.
Stanberry, Charles L., 1892, G. Ph., Pharmacist, McConnellsville.
Starbuck, Daniel Carl, 1899, M. E. in EE., Care U. S. Despatch Agent, N. Y., U. S. S. Chicago.
Steeb, Carl Eckert, 1899, B. Ph., Columbus, accountant, O. S. U.
Stephenson, Henry Thew, 1894, B. Sc., Bloomington, Ind., instructor in English, University of Indiana.
Stevens, Frank M., 1897, LL. B., Elyria.
Stevenson, Amos Claude (A. B., Oberlin College), 1900, LL. B., Fostoria.
Steward, Charles Benjamin, 1900, B. Sc. (Agr.), Marcy.
Stewart, Edwin Earle, 1895, LL. B. (M. A., Antioch College), attorney, Springfield.
Stewart, Lee Raymond, 1896, C. E., Philadelphia, Pa., N. Y. Ship Building Co.
Stewart, Harford Toland, 1896, M. E. in EE., Agent General Electric Co., Columbus.
Stiger, Thomas A., 1899, LL. B., Bucyrus.
Stimson, Charles Leslie, 1899, B. A., Columbus, 737 Bryden Road.
Stimson, George, 1900, B. A., Columbus, 737 Bryden Road.
Stinebaugh, Isaac Long, 1892, C. E., Port Clinton, deputy to county surveyor
Stone, Carlton Elijah, 1899, C. E., Gallipolis, civil engineer.
Storer, Norman Wilson, 1891, M. E. in EE., Pittsburg, Pa., Westinghouse E. & M. Co.
Storer, Simon B., 1893, M. E. in EE., Syracuse, N. Y., engineering and salesman, Westinghouse E. & M. Co.
Stouffer, Charles Irwin, 1893, LL. B., Columbus, 387 Oak street.
Stoughton, George L., 1895, LL. B. (B. A., Otterbein University).
Stull, Emmett Willet, 1894, M. E. in EE., Johnstown, Pa., draughtsman Motor Department The Lorain Steel Co.

Stump, Franklin Pierce, 1892, B. Agr., Convoy, farmer
Stump, John William, 1895, C. E., county engineer, Fai
Stump, William Lisle, 1897, G. Ph., 1898, M. Ph., Cc
Surface, Harvey Adam, 1891, B. Sc., 1892, M. Sc.
Sutherland, Margaret, 1898, B. Ph., (Mrs. Benj. Flyn
Sutphen, James Leonard, 1897, G. Ph., Columbus, 673
*Swartzel, Earl Glenn, 1895, B. Sc., died March, 1899.
Swartzel, Karl Dale, 1893, B. Sc., 1894, M. Sc., Colu
of Mathematics, State University.
Swisher, William Henry, 1896, G. Ph., M. D., Eaton,
Sykes, William Edgar, 1898, LL. B., Marietta.
Sylvester, John E., Jr., 1898, B. Ph., Wellston, editor

T

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Talbot, Herbert Swan, 1898, B. Ph., Columbus, clerk C
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Talbot, Mignon, 1892, B. A., 640 Franklin ave., Col
School.
Travis, Fred Lant, 1900, B. A., Pana, Ill., teacher.
Travis, John F., 1900, B. A., Columbus, Fellow in
University.
Taylor, Arthur W., 1894, E. M., Cleveland, chemist for
*Taylor, Francis Asbury, 1885, B. A., died July 25, 18
Taylor, Alexander R., 1895, B. Sc.
Taylor, Fredric Wellington, 1900, B. Sc. (Agr.), Woos
Taylor, Ralph Buren, 1895, B. A.
Taylor, Joseph Russell, 1887, B. A., M. A. (Columbia
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Taylor, Pearl V., 1897, B. A., Columbus, 46 West Nob
Teter, Anstie Welsh, 1896, G. Ph., Bainbridge, Phar
Thomas, James O., 1897, C. E., Columbus, 404 West
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Thompson, Carmi A., B. Ph., 1895, LL. B., Ironton,
Thompson, Howard N., 1888, B. Ph., Washington, D
sociated Press.
Tomlinson, James Rowe, 1892, C. E., Cleveland, For
Towne, Robert S., 1879, B. Sc., E. M., New York,
Northern Railway.
Townshend, Alice Margaret, 1880, B. A. (Mrs. Charles
Townshend, Arthur Bailey, 1878, B. Sc., M. D., 22 We
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Tufts, Charles Hill, 1899, E. M., Cleveland, assistant ch
Tupper, Eugene L., 1893, G. Ph., Ottawa, physician.
Turner, Arthur M., 1893, M. E. in EE., 281 Oak street
Turner, Frederick Lewis, 1897, B. A., 1898, M. A., O
High School.
Twiss, George R., 1885, B. Sc., Cleveland, teacher of P
Twiss, Edith Minot, 1895, B. A., Mt. Vernon, teacher
Twiss, Marion Evans, 1897, B. A., Columbus, State L
Tyler, Frederic Jared, 1900, B. Sc. (H. & F.), Perry.

U

Uncles, Margaret Anna, 1897, B. A., Columbus, Gill street.
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Urban, Harry Marshall, 1898, C. E., Pittsburg, Pa., "Pan Handle" R. R., assistant engineer corps.

V

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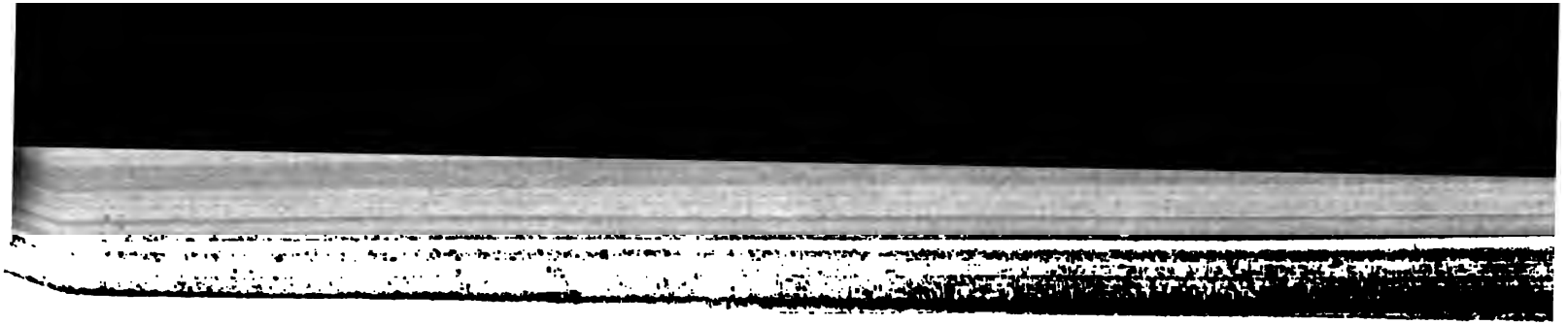
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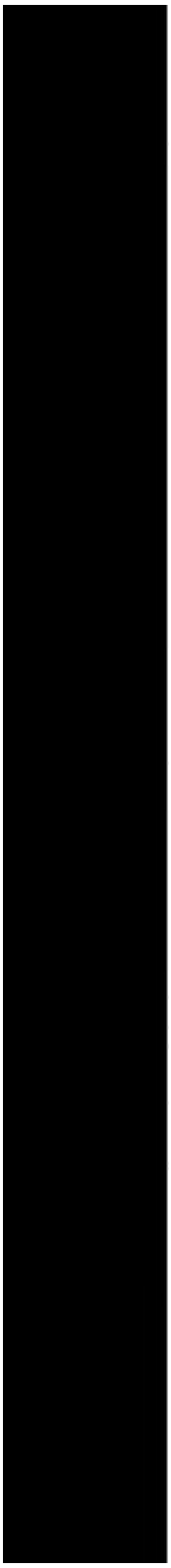
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